amateur radio

Vol. 34, No. 12
DECEMBER
1966

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"AMATEUR RADIO"

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FEDERAL COMMENT

★

A.O.C.P. EXAMINATIONS

The following letter is of importance to all prospective Amateurs and S.w.l's. Please note for the future.

Federal Secretary, W.I.A.,
Dear Sir,

As you are aware, following the discussions which took place on the revision of the Amateur Handbook, it was decided to reduce the frequency of examinations for Amateur Operators' Certificates from four to two a year, to be held on the third Tuesday in February and August, with supplementary examinations on the third Tuesday in May and November in Section L (Telegraphy).

In the light of developments which have occurred since the discussions it has now been decided to introduce the new examination arrangements as from August, 1967. Quarterly examinations will be held in January and April, 1967, as usual but not in July, 1967. The first supplementary examination in the subject of telegraphy will be held in November, 1967.

The selection of August, 1967, for the introduction of the proposed new arrangements was influenced largely by the period which was considered necessary for adequate notice to be given to all interested parties. It is expected that this date should provide sufficient time also for the Wireless Telegraphy Regulations to be amended as required and for the new Handbook to be printed and made available so that the paper on the subject of Regulations for the first examination to be held under the new arrangements may be based on the revised rules.

It would be appreciated if you would be good enough to arrange for the matter to be publicised through the normal channels of the Institute, please.

Yours faithfully,
C. M. Carroll,
for Director-General.

Federal Council and the Executive of the Wireless Institute of Australia wish all members the Compliments of the Season and bright prospects for 1967.

CONTENTS

A Simple Transistor Tester 3
Single Sideband—Power Measurements 6
How is Your Dial Calibration? .. 7
Technical Correspondence:
Transceiver Power Supplies .. 5
"The Mode of Power" 3
Sideband:
Netting with Transceivers 9
Bad Sideband Signals 9
A.R.R.L. International DX Competition 7
W.I.A. D.X.C.C. 10
John Moyle Memorial National Field Day Contest, 1967 11
Prediction Charts for December 1966 21
New Call Signs 13
DX 13
SWL 16
VHF 15
Youth Radio Clubs 15
Federal and Divisional Monthly News Reports 17
Index to Volume 34—1966 24

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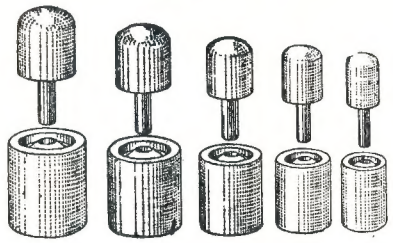

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Type 355C—Impedance ratio 2.1 : 1. 52 ohms unbalanced to 25 ohms unbalanced. 3 to 30 Mc. For use at the base of a mobile whip antenna, coupled to fixed or adjustable transmitter output impedance. Lug terminals. **Price $3.49** (inc. S.T.)

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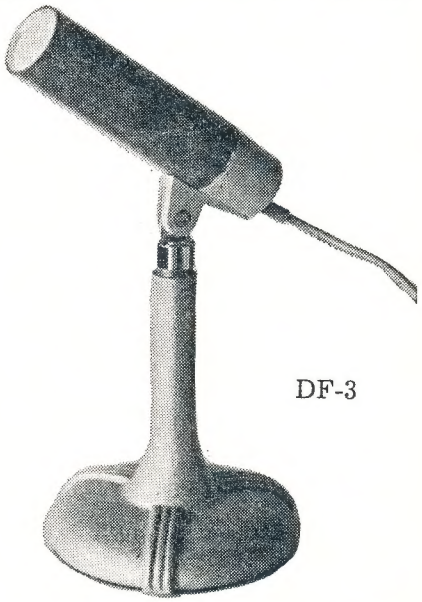

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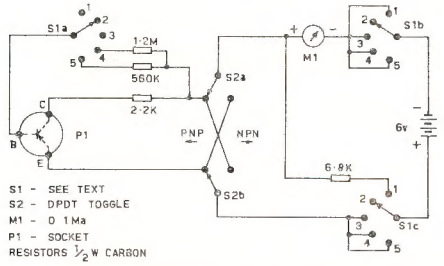
A SIMPLE TRANSISTOR TESTER

ROY PROWSE,* VK3XY

The transistor field has made great strides in the last several years and their use has become widespread. The practical application of these devices is increasing in the Ham shack, as is evidenced by the number of Hams who are using transistorised equipment both commercially manufactured and home-built.

The author has been experimenting with various transistor applications for the last few years and were it not for the fact that the junk box—a product of some 30 years' Hamming—holds many tubes and tube circuitry components, transistorised equipment would be used exclusively. However, the pocket-book dictates that the junk box be used wherever possible. When this is not possible then transistors are used and in this regard the cost is much less when compared with tubes and their circuit components. Also, metalwork requirements are considerably less.



SIMPLE TRANSISTOR TESTER

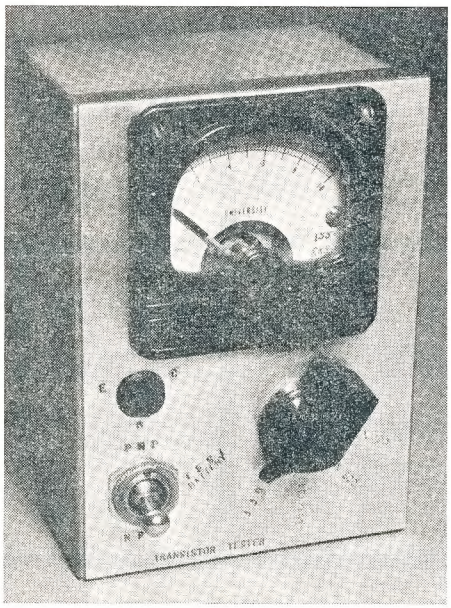
This experimentation has revealed that the spread of characteristics between transistors of the same type is sometimes quite large, and it quickly became apparent that to achieve the best results only the best of the type to be used should be procured. Also, a method was required for confirming the continuing serviceability of these devices, both PNP and NPN, which had been used again and again in various experimental circuits.

The answer, of course, is a transistor tester, but have you seen the price? Therefore, a tester was required which would provide the answers the author wanted at little cost and the box described is the simplest method the author could find of achieving this requirement, and the instrument has proved invaluable. Readers may be interested in the box which can be built from scratch for a few dollars, the only item which could be considered as expensive being the meter. The box will, of course, not read all required parameters but for a simple "go no-go" device it has been found to be all that is required.

Incidentally, use of the box in a dealer's premises has produced many looks of amazement but the desired result has been achieved in that some transistors for which the dealer wanted good money were not acceptable to the author. Only the best of the particular type wanted were taken and it can only be presumed that those that were not acceptable were sold to other experimenters and placed into use with not always the desired results being achieved.

The circuit and physical make-up of the tester is shown in the accompanying diagram and photograph. The box used is the familiar BC1366 from disposal sources and which was referred to in a previous article by the author. All components in the box are removed and the only item which is reused is the switch which is re-located, and re-wired as shown. The other items used are shown in the parts list.

Study of the circuit diagram will show that S2 selects the correct applied voltage polarity for either PNP or NPN type transistors, and that S1 has five positions. For those who do not know the BC1366, position No. 1 of this switch is a spring-loaded position from No. 2 position, and the switch must be physically held in No. 1 position to register. This position is used to test the battery voltage by placing the 6.8K resistor in series with the meter and the battery. It is not essential of course that this type switch be used—any 3-pole, 5-position switch will do.



Position No. 2, as shown, is the OFF position. Position No. 3 tests emitter-collector leakage (with the base floating), and it has been surprising to find how high this can be in many allegedly high quality transistors. However, due regard must be given, of course, to the effect that a rise in temperature can have on this parameter. Positions Nos. 4 and 5 read the common-emitter forward d.c. current-transfer ratio (beta or H_{FE}), which of course will also be subject to temperature effects, particularly with germanium types.

Positions Nos. 4 and 5 read respectively up to a maximum H_{FE} of 200 and 100. For example, on the X200 range position a reading of 0.4 mA. equals a d.c. beta of 80.

If this article stimulates your interest in transistors, then one of the aims of the author has been achieved. There are many bargains available in the transistor field and this tester will allow you to make a reliable selection of the good from the not so good, and more important still, to reject the bad, of which there are many about. A little experimenting with these devices and, like the author, you will say goodbye to tubes, pocket-book permitting. The safety factor alone warrants their use—think of the low operating voltages involved. No need to keep one hand in the pocket in the time-honoured way, which is not always successful.

☆

Technical Correspondence—

"THE MODE OF POWER"

Editor "A.R.," Dear Sir,

On page 3 of the October issue of "A.R." appears an article on a 240v. a.c. power supply by B. A. White, VK5YB.

In the last paragraph he credits me with "the mode of power".

I would be pleased if, in a subsequent issue, you would correct this statement. It is true that Barry VK-5YB saw the power plant which I made up and have been operating successfully for very many years. However, I myself gained the information from an article published in the June 1956 issue of the American publication "CQ" and which was loaned to me by Wally Green, VK6WG.

The article in "CQ" also contained additional information and circuits of alternative methods of excitation which might be of interest to other readers. Unfortunately I have no complete copy of the article. However, knowing that there is another published article could be of some assistance to those who desire to go further into the matter.

I would add that the control box containing the condensers and switching can be located at the load or operator's end of circuit. This is a decided advantage since the power unit can be placed at a distance from the operator, so reducing the exhaust noise of the prime mover. The scheme's biggest advantage appears to be that, apart from the ignition noise from the spark plug (and which is as easily suppressed), it is electrically noise free.

—Rolo Everingham, VK6BO.

AMATEUR FREQUENCIES:

USE THEM OR LOSE THEM!

* 83 Brewers Rd., Bentleigh, Vic.

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1N3193: 750 mA. at 200 p.i.v.	**40c**	,,	,,	,,
1N3194: 750 mA. at 400 p.i.v.	**55c**	,,	,,	,,
1N3195: 750 mA. at 600 p.i.v.	**75c**	,,	,,	,,

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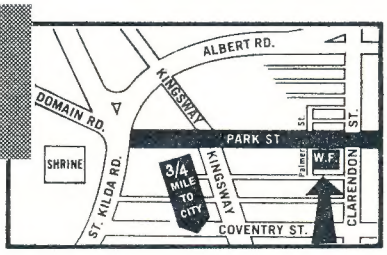

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TECHNICAL CORRESPONDENCE:

Transceiver Power Supplies

Editor "A.R.," Dear Sir,

The comments of Phil VK5NN and Lee VK7RG in "A.R." for July and September are very much to the point.

Many Amateurs long to own a piece of American-made equipment and will refuse to buy a locally made product. In some cases this is justified because the Australian maker may have failed to supply a reliable product, however, this aversion to the local product is often unjustified and many local manfacturers have demonstrated their ability to design and construct high quality equipment.

We must not lose sight of the fact that there are, in fact, three markets in Australia. Firstly, there is the "consumer product" market—Radio, T.V., etc. Then follows the "professional or capital equipment" market—this requires an entirely different design approach to cater for the much higher reliability required by people who depend upon these devices to provide saleable services. Professional engineers usually make the purchasing decisions and equipment is installed and maintained by qualified engineers and technicians. The third is the "military market." Here the demand is for very reliable equipment capable of operation under the most arduous conditions.

As the demands made upon the equipment increase, so the cost rises. It may also rise because the quantity required is quite small.

Australian Amateurs, as a class, have become used to using equipment made mostly for the military market demand somewhere between the consumer product and the professional equipment market. Equipment must be inexpensive and reasonably reliable, but, no service of vital importance will fail if the equipment does not work and so the "over-running" of certain components such as final tubes is justified.

Many years in the electronic field leads me to believe that at least one area where the Australian product is definitely superior is power supplies. The main reason for this is that supplies made in Australian factories are designed for operation from 240 or 250 volts c.p.s. a.c. and not 110/220 or even 117/234. American supplies are usually designed for 117v. 60 c.p.s. and will in many instances run hot on 50 c.p.s.

My criticism in the case of transceiver supplies is not that they run hot, but that they supply voltages which are considerably in excess of the absolute maxima listed by the tube makers in equipment where the tubes are already being run beyond their normal limits. The National NCX-A power supply is rated to supply 700v. d.c. at 300 mA., 280v. d.c. at 200 mA., plus bias and filament voltages. It performs satisfactorily without overheating and will handle an a.c. input of plus or minus 10% without distress. The dynamic regulation is quoted as 2%. **But what of the equipment voltages under these conditions of high line voltage?**

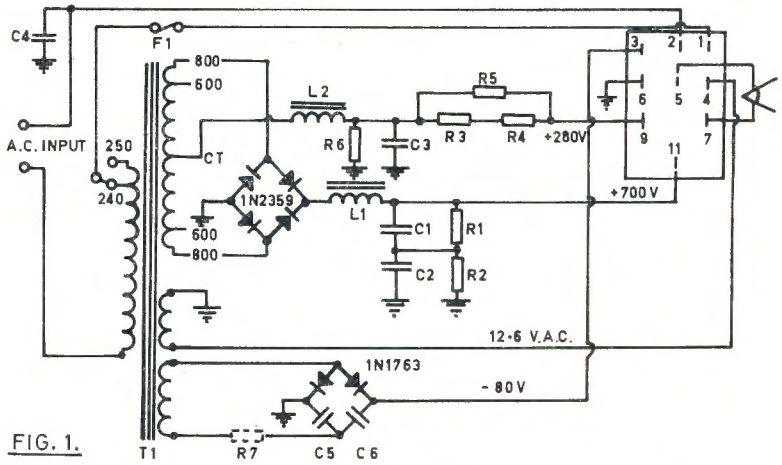

FIG. 1.

C1, C2—80μF. 450v. wkg.
C3—40μF. 450v. wkg.
C4—0.01μF. 600v. D.C.W.
C5, C6—20 μF. 150v.
R1, R2—4 x 7.5 k ohms 10w. w.w. in series.
*R3, *R4—330 ohms 10w. w.w.
R5—660 ohms 10w. w.w.
R6—30k ohms 10w.
*R7—Value to be decided on test (50-500 ohms.
T1—800/600v. c.t. 300 mA., 35v. 10 mA. (doubler), 12.6v. a.c.
L1—12/2 Hy., 25/300 mA., 60 ohms d.c. Res.
L2—2H. 200 mA., 44 ohms d.c. Res.

Table 1 lists the readings I have obtained. (Voltmeter AVO Model 8, checked at better than 1% on all ranges.) From these figures it can be seen that the static regulation between an e.h.t. load of 50 mA. (s.s.b. idling) and full plate current of 300 mA. is 720 x 100, equals 10.7% (approx.) on the 234v. input figures. This is very good indeed under static conditions and is due very largely to the low resistance of the transformer and chokes. With an e.h.t. filter capacitance of 40 uF. one could expect that the claimed dynamic regulation figure of 2% will be achieved.

a.c. input voltage	700 volt line			280 volt d.c. line			Heater	
	no load	50 mA.	300 mA.	idling	full o/p	Bias	a.c.	a.c. Tol.
258	900	790	750	310	300	—82	13.7	plus 10%
250	870	780	720	300	290	—80	13.3	plus 6%
234	820	720	680	282	272	—75	12.5	Nominal
220	770	675	640	270	260	—70	11.8	minus 6%
210	735	645	610	255	245	—67	11.2	minus 10%
When the heater voltage was adjusted to read 12.6v. other readings as follows:								
236	830	730	690	285	275	—76	12.6	

Table 1.

To me the frightening thing about these measurements is that the voltages exceed the tube manufacturers' ratings long before the equipment makers' tolerances are exceeded. Even under conditions of maximum voltage the power supply continued to run "cool" after a considerable period of operation.

A number of Amateurs using equipment of similar type, but not necessarily of the same make, have reported that the final tubes became gassy after a short period of operation. When one considers that many of the tubes used by U.S. manufacturers in their s.s.b. equipment are not readily obtainable in Australia and may cost up to about $8 or $10 per pair (with tax), it can be seen that there is a strong argument for a type of operation that will permit the final tubes to give of their best for longer periods. Remember that if your final voltage is 800v. and they idle at 50 mA. (2 x 6JB6's or similar), the plate dissipation is 40 watts.

Because of this feature of the use of American supplies, it has been decided to design Australian-made supplies which will meet the requirements of such transceivers and permit operation at the full rated 200w. (p.e.p.) input or a lower figure of about 120 watts, by simply changing secondary taps.

Australian Amateurs can purchase basic kits consisting of a transformer and two chokes for a modest sum and complete power supplies are available at prices which are about half that of an imported supply. The transformers are provided with primary taps at 240 and 250 volts to cater for the line conditions usually encountered in Australia.

S. T. Clark, VK3ASC.

AMATEUR FREQUENCIES:

ONLY THE STRONG GO ON—SO SHOULD A LOT MORE AMATEURS!

SINGLE SIDEBAND—POWER MEASUREMENTS

Following the discussions carried on over the past year with the Postmaster-General's Department on the subject of single sideband power levels and methods of measurement, Federal Executive of the W.I.A. have received the following letter from the Department. It sets out quite clearly the allowable power and acceptable method of measurement, both of which are fully endorsed by the Institute.

The concept of listing acceptable commercial equipment is an extremely practical one and should be of assistance to all concerned. This first list does not presume to be exhaustive and suggestions from all Amateurs for additions to it would be welcomed.

Such suggestions should be sent to the Federal Secretary, W.I.A. (P.O. Box 2611W, Melbourne, Victoria), and not to the Department. Inclusion of photostat copies of the maker's specifications and recommended operating conditions will be of great assistance in negotiating approval.

Additions to the list of approved equipment will appear in "A.R." as and when such approval is obtained.

—H. L. Hepburn,
Federal Vice-President,
W.I.A.

Federal Secretary, W.I.A.,

Dear Sir,

As discussed previously in connection with the use of single sideband equipment, forwarded herewith is a list of equipment types which the Department is prepared to accept as meeting the 400 watt. p.e.p. power output limitation when operated in accordance with the maker's specification.

B. & W.:
6100

Central Electronics:
*200V
*10A
*600L

Collins Radio:
*32S1
*32S3
KWM1
*KWM2

R. L. Drake and Co.:
*TR4
TX4
*TR3

Dynalab Co..
HW12
HW22
HW32

E.I. Co.:
757
*753

Hallicrafters:
HT46
SR150
SR160
*HT44
*SR500
*HT32B
*HT37

Hammarlund:
HX500
*HX50
*HX50A

Heathkit:
SB110
*HW12
*SB100
*SB400

E. F. Johnson:
Viking 200
Valiant 500
Courier
Invader

Lafayette:
HA250 (linear amplifier)

National:
NCX3
NCX5

R.F. Communications:
RF301

Swan Electronics:
120
*350
*400

Transcon Electronics:
SBT-3

KW Electronics:
*KW600L
KW2000
KW2000A

World Radio Laboratories:
Duobander 84
*Galaxy III.
*Galaxy V.

Yaesu Musen:
FL100
FL200
*FL1000

* This equipment must be modified in such manner as to preclude operation with input power in excess of 150 watts to the final transmitter stage when employed for type A1 emission.

In those cases where it becomes necessary to make a measurement of the peak envelope power, the following method shall be employed.

Apply two non-harmonically related sinsoidal tones of equal amplitude to the single sideband transmitter which is operating into a matching resistive dummy load and an appropriate r.f. current meter. With an oscilloscope connected across this load, the transmitter with the carrier fully suppressed is adjusted for maximum power output coinciding with linear operation as indicated visually on the oscilloscope.

The power output is then calculated by the formula:—

$$Pm = I^2 R$$

where Pm = mean power in watts.
I = r.f. current in amps. flowing in the dummy load.
R = resistance of the dummy load in ohms.

The resultant figure, being mean power, is doubled to give peak envelope power and this value must not exceed 400 watts.

Your comments on the above measuring method and advice of other types of equipment which might meet requirements would be appreciated in due course, please.

Yours faithfully,
C. M. Carroll,
for Director-General.

☆

CONTEST CALENDAR

10th Dec. to 15th Jan.—Ross A. Hull Memorial Trophy V.h.f. Contest.
4th/5th Feb.—33rd A.R.R.L. International DX Competition (phone).
11th/12th Feb.—John Moyle Memorial National Field Day Contest.
18th/19th Feb.—33rd A.R.R.L. International DX Competition (c.w.).
4th/19th Feb.—A.R.R.L. Novice Roundup.

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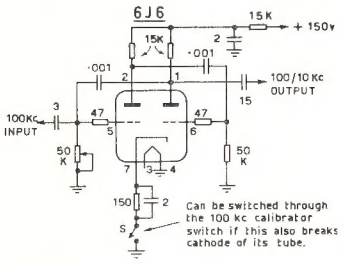
HOW IS YOUR DIAL CALIBRATION?

BILL MAGNUSSON, VK3AHT*

Not many years ago the person who had a 100 Kc. crystal calibrator was indeed fortunate. Today, however, a commercial receiver or transceiver which does not include this facility would be difficult to find. Such is progress. That which was once considered an accessory is now a normal functional part of the equipment. We refer to it constantly; to check calibration, meet skeds, give frequency checks, etc. But is it enough? How many times have you wondered as I did, "Just how accurate is the dial read-out or interpolation within these 100 Kc. check points?"

You may be surprised and probably not agreeably! In all but the most expensive equipment you will find small errors due to non-linearity in the tuning mechanism. True, they may be small, but what's the use of having dial read-out to one Kc. if the calibration is half a Kc. out at some point between the 100 Kc. calibration pips?

After having been accused a few too many times of being off frequency I decided to do something about it. But what? That was the question. A 50 Kc. crystal? Perhaps, but these are specials, very expensive and would probably require circuit modifications. A multivibrator, why not? They'd worked quite well for me in the past. But it had to be simple, the finished unit compact and above all no circuit mods. or holes to be drilled in the parent equipment.



FREQUENCY DIVIDER CIRCUIT FOR CALIBRATOR

The little unit to be described filled all requirements admirably. There are no critical components, it can be constructed on a small panel 1¾ in. by 2¼ in., hardly bulky, which can be tucked away between a couple of valves and bolted to a suitable hole (there are usually plenty). Circuit connections are simply a matter of borrowing power from the parent equipment.

Basically this is it. The 100 Kc. calibrator output is used to lock a frequency divided at its 10th harmonic. The output, containing undiminished 100 Kc. and very slightly weaker 10 Kc. check points, is fed back to the receiver via a small coupling capacitor.

* 359 Williamstown Rd., Yarraville, Vic.

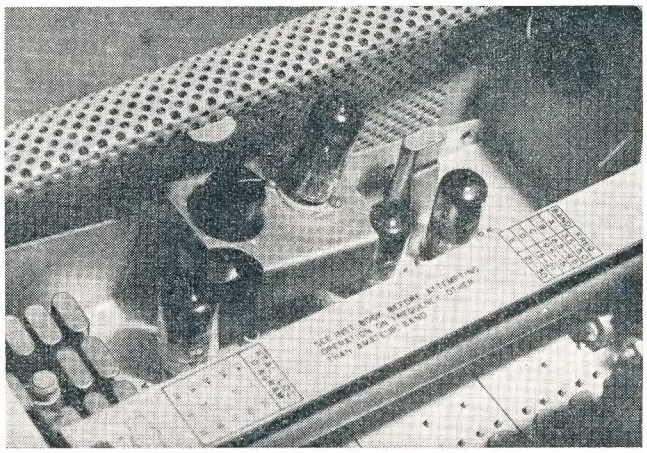
CIRCUIT

This is quite standard and was gleaned from a R.S.G.B. article of some years ago where it was actually one stage of a more pretentious frequency sub-standard. It contains no tricks and should work first time. The tube can, of course, be virtually any twin triode but the 6J6 is ideal. The switched cathode connection is necessary to prevent hash from being generated by the multivibrator when drive is not present from the 100 Kc. source.

I used a panadaptor to set mine and this considerably simplifies the adjustment as the number of pips can be counted directly from the c.r.t. display.

OPERATION

Once adjusted the unit is perfectly stable and the note at each 10 Kc. point is T9. Output is quite usable to 30 Mc., the 10 Kc. pips being about S2 at this frequency.



CONSTRUCTION

This will depend on the availability of space in the parent equipment. As can be seen in the circuit and the photograph, the only components of any size are the tube and the pot. These therefore make up most of the total bulk of the unit.

The photograph will give an idea of the size of my own unit which is fitted to the 75S-1 receiver.

ADJUSTMENT

(1) Identify two adjacent 100 Kc. check points and calibrate the dial.

(2) Slowly advance the pot. from the earthy end while rocking the receiver dial back and forth around the 50 Kc. mark midway between the two previously identified 100 Kc. pips.

(3) At approx. mid scale on the pot. a signal will be heard which should zero at 50 Kc.

(4) Leave the pot. and count the number of signals between the two 100 Kc. pips. There should be nine. If not, advance or retard the pot. until nine pips can be counted.

(5) The final setting can be obtained by tuning in one of the 10 Kc. pips and then slowly rotating the pot., first one way and then the other, until the divider drops out of sync. The correct adjustment is approx. half way between these points.

Used in conjunction with a receiver which has direct one Kc. readout on the dial, it should now be possible to hit a specified frequency within ± 100 cycles. This is quite good accuracy, indeed, to achieve any greater degree one would require equipment much more costly than the couple of dollars outlay for the above unit.

— . . . —

A.R.R.L. INTERNATIONAL DX COMPETITION

Amateurs throughout the world are invited to participate in the 33rd A.R.R.L. International DX Competition. Special certificates of performance will be issued to the top phone and c.w. scorer in each country. In addition, a handsome plaque will be awarded to the continental high scorers (non W/VE), single operator, on phone and on c.w.

Dates: Phone—Feb. 4-5, March 4-5, 1967. C.w.—Feb. 18-19, March 18-19, 1967.

Times: 0001 G.M.T., Saturday, to 2400 G.M.T., Sunday.

Object: DX stations QSO as many continental U.S. and Canadian stations as possible. Repeat contacts on additional bands are permitted.

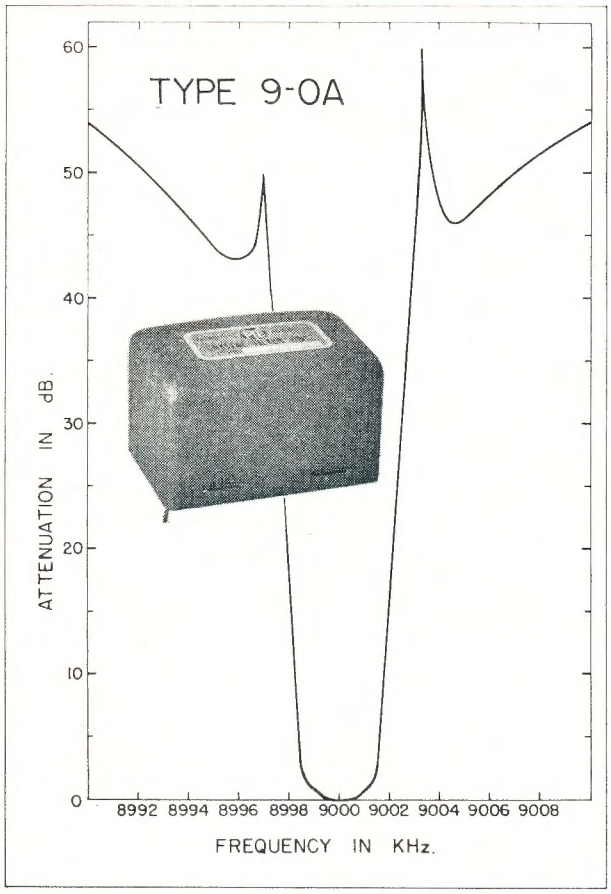
Points: Each complete contact counts three points, incomplete contacts count two points.

Exchange: Send RS(T) and input power. (The W/VE will send RS(T) and his State/Province.)

Multipliers: On each band, your multipliers are the 48 continental U.S. States plus VE1-VE8 and VO. Your final multiplier is the sum of multipliers worked on each band. QSO points time the final multiplier equals the final score.

Logs: Logs must contain dates, times in G.M.T., bands, exchanges and points. Logs, with summary sheet and multiplier check list, must be sent to A.R.R.L. no later than April 22, 1967. Send to: A.R.R.L. International DX Competition, 225 Main St., Newington, Connecticut, U.S.A. 06111.

CRYSTAL PYE DIVISION



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40 dB Bandwidth: 6 Kc. max.
Pass Band Ripple: 2 dB max.
Insertion Loss: 4.5 dB.
Input Termination 150 ohms plus 150 pF.
Output Termination: 150 ohms plus 120 pF.
Physical Dimensions: 2" x 1.375" x 1.125".

Recommended Oscillator Crystals: 8998.0, 9002.0 Kc.

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Quantity discounts will be negotiated.

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★ 48.0 Mc. to 61.0 Mc. .	± 0.005%. In Style "D" Holders, ½" pin spacing	$5.65
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SIDEBAND

Sub-Editor: PHIL WILLIAMS, VK5NN

Main observations on the single sideband front this month have been the extensive use of this mode during the week-end of the "CQ" World-Wide DX Contest—phone section, and the Boy Scouts' Jamboree-on-the-Air, both of which happened to fall together. The organisers of both of these had better get together and arrange different week-ends in future, as I heard so many people say that they would have liked to have been in both, but, of course, a prior arrangement with the Scouts precluded participation in the DX Contest.

The Jamboree is now a well established feature of the Scout calendar throughout the world, and the number of sideband transceivers operating in Scout Halls, with antenna systems erected by the boys was commendable. These small transceivers lend themselves to this type of portable operation very readily. A pleasing feature this year was the large participation by Girl Guides. There appeared to be many more groups of girls on the air this year, and they were very good operators, too.

Since the Jamboree I have had numerous enquiries from Scouts regarding the methods of studying for the exam and obtaining a licence, and these lads will certainly make good Amateurs.

NETTING WITH TRANSCEIVERS

One hears many discussions on the air (and complaints) regarding netting and tuning up, especially the problems encountered with transceivers. The following points should be remembered and scrupulously observed:—

(a) Tune the station in carefully until you consider that the voice sounds natural—not just intelligible.

(b) After you have netted as well as possible, do not proceed to tune up the transmitter on the net frequency before you call.

It has been established that a male voice is intelligible with carrier insertion anywhere between minus 200 and plus 500 cycles per second from the correct frequency required for natural voice reproduction. While writing this I am listening to two VK3 stations, both using transceivers, using break-in with vox control, and about 200 c.p.s. apart. To me, one sounds quite natural and the other rather higher pitched, but both are perfectly intelligible. However, if I make the latter station sound normal—and I know his normal speaking voice, then the first station sounds anything but normal—quite ghastly, in fact.

I can only wonder whether my friend's transceiver oscillators are changing frequency between transmit and receive modes—this is possible—or whether he is just not very fussy about tuning in. This oscillator frequency changing can sometimes occur with very strong signals actuating the a.g.c., and it is a good plan to check the oscillators, both crystal and v.f. types, on a separate receiver, if you are constantly receiving complaints about your netting and your procedures are apparently correct in other respects.

And now, on the subject of tuning up your transmitter or transceiver on a net frequency. I can only ask that you move to a clear spot on the dial to tune up, or preferably, and as stated in the Handbook for the Guidance—using a dummy aerial, the most satisfactory of which is a large non-inductive resistor. Many of the antenna tuners, "match boxes," or whatever they may be called, have a 50 ohm load built into them and this makes the job very simple.

Some transmitters and transceivers use an audio oscillator to provide a signal into the audio amplifier on transceiver. This system of tuning up is quite good, but we must warn operators that, for example, the 1000 c.p.s. audio tone, if put on top of another net, can cause complete dislocation of the net and I sometimes wonder at the tolerance of net operators when they welcome (?) a new operator into the net after he has just tuned up for half a minute "bang" on top of the net stations.

I can only say, that if you do not possess a dummy load, then please move to a clear channel, or park on top of another source of noise (there are some infernal machines left running in the Amateur bands, and you can tell from the sound of them just what they are or are not doing) in order to get your tuning done. This subject is treated at some length, because I am quite sure some operators think they are putting out a "carrier" frequency, zero-beating with other (absent) carriers on the net, and therefore causing no interference.

BAD SIDEBAND SIGNALS

Yes, there are plenty of them, and you'll hear more of them around as more stations come on. The causes are numerous, but I shall list some of the common causes here, in the hope that it may help the unfortunate sidebander who gets the thumbs down sign from his fellow Amateurs.

"Audio gain too high" is the commonest complaint of all, especially for the newcomer to sideband, who is anxious to get amongst the DX and does not watch either the meters or his enthusiasm, when working the weak, rare ones. The tendency to climb into the mike should be watched, and a "weather-eye" kept on the plate meter or output meter at all times. These should kick up to about half of the peak c.w. readings on test, when you speak. The handbooks usually tell you all about this and owners of commercial gear should read them carefully. The monitor oscilloscope is a very good monitor, and infallible in detecting flat-topping whatever the cause.

Incorrect loading of the transmitter is another frequent cause of broad distorting signals and even those exciters with variable loading controls should normally be adjusted using an s.w.r. meter followed by an aerial tuner. The improvements are quite amazing where the aerial s.w.r. is high, as even if proper matching is possible, the resulting low or high Q of the output circuit may cause some queer results. The aerial tuner, Z-match, match box, a.c.u. —call it what you like—will make sure your final is presented with its correct load on the pi output tuned circuit. Linear amplifiers must be correctly loaded, otherwise spurious emissions may occur, even including parasitic oscillations at near output frequency. Sudden troubles with previously tame installations often result from broken aerials or feeders, for which the remedies are obvious. The s.w.r. meter will show up troubles of this sort very quickly.

Parasitic oscillations are diabolical things to cure, and I can only suggest that you be sure to include all the suppressors and chokes when you build and make provision for neutralising all class AB1 or AB2 linear amplifiers. You may operate on 80 and 40 without

(Continued on Page 10)

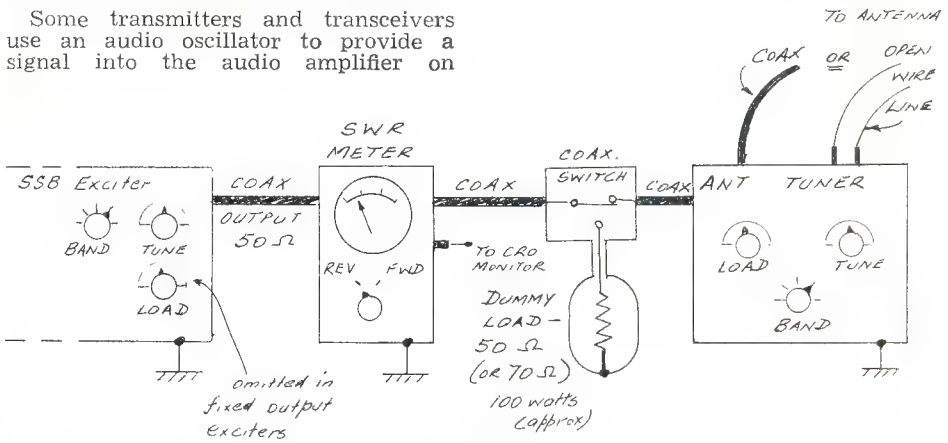

Fig. 1.—Set-up to give correct loading impedance to an s.s.b. exciter (or amplifier).

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SIDEBAND

(Continued from Page 9)

neutralisation, but not on 15 and 10 metres.

R.f. getting into the audio is another common cause of bad signals. This occurs with improperly shielded and filtered microphones and cables, especially where linear amplifiers are in use, and an older crysal microphone is retained in use. Keep the r.f. in boxes and low impedance co-axial cables, properly matched, in the shack, ground all of the equipment, and make sure the mike and its cables are well screened. Early audio stages must be screened and grids by-passed for r.f., and it is worth pointing out that these measures are better carried out while building than having to add them afterwards.

Again I would add, that if you receive a bad report, just accept it in the spirit in which it is given and get the fault repaired, using a dummy load on the transmitter for testing. The oscilloscope and station receiver may be very useful for tracking down such faults.

As a final word of warning—please keep the covers on the linear tube compartment so that you will not kill yourself on the e.h.t. supply to the final plates. A 6146 will stand 800 volts, but the operator probably will not!

Next time I have a few notes on input circuits for grounded-grid amplifier stages. 73, Phil VK5NN.

W.I.A. D.X.C.C.

Listed below are the highest twelve members in each section. Position in the list is determined by the first number shown. The first number represents the participant's total countries less any credits given for deleted countries. The second number shown represents the total D.X.C.C. credits given, including deleted countries. Where totals are the same, listings will be alphabetical by call sign.

Credits for new members and those whose totals have been amended are also shown.

PHONE

VK3AHO	310/322	VK4HR	261/277
VK5MS	309/330	VK2JZ	253/268
VK5AB	300/314	VK3TL	241/245
VK6MK	298/315	VK2ADE	223/237
VK6RU	296/319	VK2AAK	221/225
VK4FJ	273/290	VK2APK	217/220
New Members:			
VK5GX	101/101	VK6XX	110/110
VK4PX	108/109		
Amendments:			
VK3SM	117/119	VK2AGH	108/118

C.W.

VK3KB	317/340	VK2AGH	276/289
VK2ADE	291/313	VK3AHQ	276/288
VK3CX	291/312	VK3NC	266/286
VK2QL	288/308	VK3ARX	261/269
VK4FJ	286/308	VK6RU	251/272
VK2EO	279/300	VK3XB	248/261
Amendments:			
VK3YL	239/256	VK3KS	203/209
VK3RJ	231/244		

OPEN

VK2ADE	305/329	VK4HR	279/301
VK2AGH	305/323	VK2ACX	276/300
VK6RU	301/324	VK3ARX	270/278
VK6MK	300/317	VK3NC	267/287
VK4FJ	292/314	VK3JA	265/283
VK2VN	285/300	VK3TL	260/264
New Member:			
VK4CK	103/104		
Amendments:			
VK2SG	161/165	VK4PX	143/148

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JOHN MOYLE MEMORIAL NATIONAL FIELD DAY CONTEST, 1967

SATURDAY, 11th FEB., 0800 G.M.T., TO SUNDAY, 12th FEB., 0800 G.M.T., 1967

The Federal Contest Committee of the Wireless Institute of Australia invites all Australian Amateur and Short Wave Listeners to participate in this Annual Contest, which is held to perpetuate the memory of John Moyle, whose efforts advanced the Amateur Radio Service.

There are two divisions of this Contest, one of 24 hours continuous duration, and one of 6 hours continuous duration. The six-hour period has been included to encourage the operator who is unable to participate for the full 24-hour period.

Operators using 25 watts or less input to the final stage will be considered for a certificate where his activity warrants its issue.

DATE

From 0800 G.M.T., 11th February, to 0800 G.M.T., 12th February, 1967.

OBJECTS

The operators of Portable and Mobile Stations within all VK Call Areas will endeavour to contact other Portable/Mobile and Fixed Stations in Australia and Overseas Call Areas.

RULES

1. There are two divisions, one of six (6) hours, and one of twenty-four (24) hours duration. The six-hour period for operating may be chosen from any time during the Contest. but the six-hour period so chosen **must** be **continuous.** In each division, there are six sections:—

(a) Portable/Mobile Transmitting, Phone.
(b) Portable/Mobile Transmitting, C.w.
(c) Portable/Mobile Transmitting, Open.
(d) Portable/Mobile Transmitting, Multiple Operation, open only.
(e) Fixed Transmitting Stations working Portable/Mobile Stations, open only.
(f) Reception of Portable/Mobile Stations.

2. All Australian Amateurs are encouraged to take part. Operators will be limited to their licensed power. This power shall be derived from a self-contained and fully portable source.

(a) Portable/Mobile Stations shall not be situated in any occupied dwelling or building. Portable/Mobile Stations may be moved from place to place during the Contest.

No apparatus shall be set up on the site earlier than 24 hours prior to the Contest.

All Amateur bands may be used, but no cross band operating is permitted. Cross mode operation is permitted.

Entrants in Section (d) for Multiple Operator Stations can set up separate transmitters to work on different bands at the same time. All such units of a Multiple Operator Station must be located within an area that can be encompassed by a circle not greater than half a mile diameter.

For each transmitter of a Multiple Operator Station a separate log shall be kept with serial numbers starting from 001, and increasing by one for each successive contact. All logs of a Multiple Operator Station shall be submitted by the operator under whose Call Sign the transmitters are working. No two transmitters of a Multiple Operator Station are permitted to operate on the same band at any time.

3. Amateurs may enter for any section.

4. One contact per station for phone to phone, also one for c.w. to c.w. per band is permitted. Cross mode operation will be accepted for scoring.

5. Entrants must operate within the terms of their licences and in particular observe the regulations with regards to portable operation.

6. Serial numbers consisting of RS or RST report plus three figures commencing with 001 and increasing by one for each successive contact shall be exchanged.

7. **Scoring—**

(a) **Portable/Mobile Stations:**

For contacts with Portable/Mobile Stations outside entrant's Call Area .... **15 points**

For contacts with Portable/Mobile Stations within entrant's Call Area .... **10 points**

For contacts with Fixed Stations outside the entrant's Call Area .... **5 points**

For contacts with Fixed Stations within the entrant's Call Area .... **2 points**

(b) **Fixed Stations:**

For contacts with Portable/Mobile Statons outside entrant's Call Area .... **15 points**

For contacts with Portable/Mobile Stations within entrant's Call Area .... **10 points**

8. The following shall constitute Call Areas: VK1, VK2, VK3, VK4, VK5, VK6, VK7, VK8, VK9 and VK0.

9. All logs shall be set out under the following headings: Date/Time (G.M.T.), Band, Emission, Call Sign, RST/No. Sent, RST/No. Received, Points Claimed. Contacts must be listed in numerical order.

In addition, there shall be a front sheet showing the following information:—

Name ....Address . . ..

Call Sign . . ..Section . . ..

Division..... ... . (6-hour or 24-hour)

Points Claimed . . . .

Call Sign of other op./s (if any).....

Location of Portable/Mobile Station.....

From ..... hours to..... .....hours

A brief description of equipment used, and points claimed, followed by the declaration:

"I hereby certify that I have operated in accordance with the rules and spirit of the Contest."

Signed .. . . .Date. .....

10. The right is reserved to disqualify any entrant who, during the Contest, has not observed the Regulations and the Rules of this Contest, or who has consistently departed from the accepted code of operating ethics.

11. The decision of the Federal Contest Manager of the Wireless Institute of Australia is final and no disputes will be entered into.

12. Certificates will be awarded to the highest scorer of each section of each division. Additional certificates may be issued at the discretion of the F.C.C. The six-hour certificates cannot be won by a 24-hour entrant.

13. **Return of Logs:**

All entries must be postmarked not later than 28th February, 1967, and be clearly marked "John Moyle Memorial National Field Day Contest, 1967," and addressed to:—

Federal Contest Manager, W.I.A., 55 Moulden Ave., Mt. Yokine, Western Australia.

RECEIVING SECTION

14. This section is open to all Short Wave Listeners in VK Call Areas. The Rules shall be the same as for the Transmitting Stations, but may omit the serial numbers received.

Logs must show the Call Sign of the Station heard, the serial number sent by it, and the Call Sign of the Station being worked.

Scoring will be on the same basis as for Transmitting Stations. It will not be sufficient to log a station calling CQ. A station may be logged once only for phone and once for c.w. in each band.

Awards: Certificates will be awarded for the highest scorer in each Call Area.

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DX

Sub-Editor: ALAN SHAWSMITH, VK4SS
35 Whynot St., West End, Brisbane, Qld.

Worthy of comment this month is the improved conditions on 21 and 28 Mc. The latter during the mornings has been open to U.S.A., Central America and Caribbean areas, as well as a few short skip signals in the Pacific and South East Asia. 21 Mc. also in the course of a day is open to North and South America and Asia, with Europe putting in a brief appearance in the later afternoons and occasionally at night around 1200 G.M.T. Both these bands should steadily improve.

20 mx, of course, is wide open to everywhere during each 24-hour cycle. 80 and 40 mx appear to have fallen away somewhat; the long and short path on the latter to Europe being something of a fringe circuit, with signals weak and difficult to work. On 80 mx the Asians are becoming audible before midnight, but the QRN at this QTH is also increasing rapidly.

NOTES AND NEWS

Easter Is.: Wally WA2PTQ plans to operate from here for a period of three months, starting about Oct. 10. He'll be using a Swan 350, but is unsure of his call sign at the moment. (LIDXA)

United Nations Neutral Zone: Paul I1RBJ will be operating I0RB from what might very well be a new country for D.X.C.C. He plans to be on s.s.b. only. Probably QRT by the time you rcd. this, but if you made a QSO, QSL via W2GHK, Box 7388, Newark, New Jersey, 07107. (LIDXA)

9X5VF: QSLs may be had from ON5PD, the customary GMT/GMD and SAE/IRCs for reply are required. (LIDXA)

VU2DIA QSLs: These may be obtained from this address: B. S. Hedge, VU2DIA, Extra Assistant Director, I.S.P.W. Stn., Port Blair, Andamans, India A. A dollar or so goes a long way in assuring a speedy and direct reply.

Wallis Island: FW8RC, Robert, has a sked with some W/K7 stations most Saturdays and Sundays at 0600 G.M.T. on 14244 s.s.b. (LIDXA)

Camerouns: HK1QQ will be here for a two-year stay. Call now TJ1QQ, QSL via W4DQS. (G3UGT)

Malawi: 7Q7PBD, Peter, plans to be active again now that he has returned. (G3UGT)

Seychelles: George VQ9G is active from here. (G3UGT)

Gabon: TR8AD is active a.m., around 21190, 14225 kc., mostly week-ends. TR8AG is still active c.w. (G3UGT). QSL via Guy Vallier, B.P. 157, Libreville.

Zambia: Bon 9J2BK is active 15, 20 mx. (G3UGT)

Greenland: All KG1 now changed to OX5. (G3UGT)

Canada: For the Centennial year 1967, all VE prefixes change to 3C, VO to 3B. (G3UGT)

Guatemala: TG0AA operated by TG9EP is active week-ends around 14330 kc. from 2100z. QSL P.O. Box 684, Guatemala City. (G3UGT)

Indonesia: Bob 9V1LP is presently signing W0GTA/8F4 from Sumatra. He will be on almost daily at 1400 G.M.T. on 14140 s.s.b., listening 14225. He also operates 15 mx as well, as c.w. on all bands. (LIDXA)

Brunei: VS5MH on 14192 listening 14210 at about 1230 G.M.T., is active. (LIDXA)

Christmas Island: VK9DR and VK9XI are back again. VK9XI was worked on 14110 listening 14240, at about 12-1600 G.M.T. QSL via W2GHK. (LIDXA)

Crozet: Max FB8WW has been on about 14210 at 1145 G.M.T. He usually QRT as soon as the pile-up grows. QSL K2MGE. (LIDXA)

Ebon and Cormoran QSLs: These are not worth the paper they are printed on. You can hang them next to XW8AW/BY and Gus' Chagos card. They count for nothing, and A.R.R.L. has disqualified them for D.X.C.C. status. (LIDXA)

Solomon Is.: Steve VK4LN has been active on 14240 around 0700 G.M.T. QSL via W7WLL. Also VR4CR 14015, 0500z. (Fla. DXer).

Galapagos Is.: HC8FN and HC8JG are both active on 14 and 21 Mc. (Fla. DXer)

Crete: SV0WL will stay here for two years. QSL via W3CJK. (VE3FXR)

Dahomey: 5N2AAW and 5N2AAX have licences to operate from Dahomey. They will be active week-ends. Signs TY2BC. (VE3FXR)

Das Is.: Active here is MP4DAH on 21 Mc. s.s.b. QSL DJ4AB.

Aldabra: VQ7HY is said to be active, for a period of six months. Modes c.w./s.s.b., 14 Mc. (VE3FXR)

Farquhar Is.: Don W9WNV at the time of typing this is about to open from here after just concluding a stint from VQ9AA/D Desroches Is. Call will be VQ9AA/F. Don and Jose CR7GF intend to go on from here to other exotic Indian Ocean areas so keep an ear to the frequencies. Don is always easily located by the big pile-up about 5-up from his frequency. QSL W4ECI.

Brunei: More info from here says that Jack VS5JC is on nightly from 1200-1600z. Freq. approx. 14025 and 7008. Also uses a.m. QSL W5VA. Jack will QRT from here on Jan. '67 and move to Malaysia where his call will be 9M2XX.

Sir Gus, W4BPD: The great DX-peditioner is now putting out a DX magazine. It is reported to be a good publication and it should be if it included extracts from Gus' fabulous travels. No other info as regards rates, etc.

Falkland Is.: VP8HJ reported active on c.w. 14 Mc. around 1030z. QSL W2CTN. (VK4UC)

Uruguay: Have you worked CX9AAN. This is Willi from Zanzibar, who incidentally admits unashamedly that he is an uncertain QSL. Did anyone get a card from him when he was VQ1GDW. However, now that he has appointed W2CTN to handle the situation, all should be OK.

Azores: Lloyd and Iris are currently signing CT2YA from here. Some doubt as to their next movement, but keep an ear to the usual frequencies. QSL Yasme.

Grand Cayman Is.: This stint is now over, but I have been asked by Doc K4CAH to publish QSL info as there seems to be some confusion re same. ZF1EP, C/o. W4PJG, P.O. Box 1647, Ft. Myers, Fla. 33902. Several VKs did make the QSO.

Antarctica: KC4USH gives his QTH as Howard Station, 2,000 miles south of N.Z. QSL to K1NAP, Davisville, Rhode Is.

The following by courtesy of ZL1HV:—

Port. Timor: CR8AB is now reported as a boot-legger. Was thought to be ex-CR-6JJ, but not so.

Shetland Is.: GM3SVK active and looking for Oceania stations on all bands including 1.8 Mc.

Volcano Is.: KG6IC still active, 14 s.s.b., 0830z.

South Orkneys: LU1ZG, LU2ZG, VP8EG all on 14 c.w. now.

VR4LN/VR1 reported as foney.

Botswana (used to be Bechuanaland): ZS9G on 28 Mc., a.m., 1900z.

Jan Mayen: JY6XF 14 c.w. 1400z s.s.b. 1700z.

New Amsterdam: FB8ZZ worked on 20 c.w. 1100z. QSL FR7ZD.

Dakar: 6W8DD daily on 14 c.w. 0730z.

Lord Howe Is.: When you read this if all goes according to plan, Arch VK5XK will be in the middle of his holiday and stint from this peaceful spot. Bands 80, 40 and 20 c.w. around 3508, 7010, 14015 give or take a few, depending on QRM.

ACTIVITIES

Dud VK4MY reports from the Gold Coast that conditions overall are improved. Another convertee to s.s.b., he has worked the following on 14 Mc.: 4X4HW, GM3DPK, VS9ABL, DU1EH, KC4USS, GC2FMV, SL6BH, IS1TDW, IT1SAI, CX1AAC, CX9CO, HI8XAL, FB8YY, EP2BQ, OX3BX, KC4USH, also Ks and Ws on 10 mx.

Chas VK4UC, who really runs QRP, logged these nice ones on 14 Mc. c.w.: VP8HJ 1030z, HK5TS 0600z, UG6AW 0430z, ON4NC 0830z, ON5ZO 0700z, PY5BAJ 1000z, HC1BW 0600z, HC1HB 0700z, KS4CC 0800z, CT2YA 0830z, CX-9AAN 1040z, HK5YC 0600z, UA2KAW 0600z, FB8YY 0700z, HK7UL 0700z, also Europeans.

Peter VK4PJ writes giving an impressive list of s.s.b. worked on 20, 15, 10 mx. His Galaxy and beam seem to be really doing the job. Peter reports many good openings on 15 and 10 mx, which is confirmed by other reports, both local and overseas. On the latter band, several Europeans were worked at good strength, also some Oceania prefixes. On 15 mx calls such as HV9J, CR9AK, YA5RG, MP4MAW, F8PA, PA0LS, SM7SX, ZC4CN were QSOed just to mention a few. On 20 mx some of the best were: OA8D, CN8BV, VS9OC, VS9AGH, VP5RB, F2KC, CE1FC, ON4NC, ON4BZ, TI-2HP, VE2AUT, HK2KL, VS6AJ, VQ9AA, ZS-6VX, ET3AC, OK1AOP, etc.

Ken VK3TL, with his big quad, landed this long list of choice ones: 20 mx c.w., s.s.b.: CE6CA, CE9AO (Sth. Shetlands), CN8BV, CR-7GJ, CR7GF, CT3AU, CX1FB, CX1OP, CX9CO, CX9AAN, CX2CO, EI3S, EP3BQ, ET3AC, GC-2FMV, GC3FKW, GD6TIU, GM2HCZ, HI8XAL, HI8LC, KM9AB, MP4TBO, KP4AOO/KG4 (Guantanamo B.), OA8V, OX3BX, PJ2AQ/C, SL3ZV, VE3FJZ/SU, SV1BH, TG8CJ, TI8LH, UF6KPE, UF6QB, VO1HP, VP2AC, VP2KJ (St. Kitts), VP9BDA, VQ8AX, VQ9AA/D, VR6TC, XW8CA, YV9AA, ZC4CN, ZC4CI, I1RB/4U, 4X4HQ (Israel), 5A4TR, 5U7AK, 6O6BW, 6Y-5BB, 9M8RS. Best QSLs received: LA5CI/P (Jan Mayen), I1CXT/IS, ZB2AM, ZB2AJ, W5HWR/VP9, 9G1FR, ZC4CI, TG8CJ, EI3S, VP2AAW, VP2AA, VP2GR, VP2GS, HB0ABS.

QTHs

KS4CC—Box 1148, Miami, Fla., 33148.
HC1HB, HC1BW—W3CQZ.
W0GTA/8F4—W2CTN.
VQ8AX—VQ8AD.
I1RB/4U—W2GHK.
PJ2AO/C -P.O. 273, St. Nicolas.
6O6BW—W4HKJ.
HI8XMT—U.S. Embassy, Santa Domingo.
CT3AS—R.S.G.B. ex-G3SJ.
VS9HRV Kuria Muria—VS9ARV or R.S.G.B.
5J4RCA—Box 2300, Madellen, Colombia.
CO8MN—Box 102, Bayamo, Cuba.

SUMMARY

Being a Ham is belonging to the great Brotherhood. One half-million of us: equal, without class prejudice, color or creed. But, even within this big family, clubs are daily being created, to meet the needs of those who have special interests or activities. The Int. S.s.b'ers puts personalities before prefixes. The A.H.C. or Award Hunters' Club is self explanatory in its aims. Also other clubs exist for technical discussion rather than social togetherness. In them each Ham finds his sense of belonging according to his particular desires.

Let me bring to your notice the P.L.C. (Professional Loafers' Club). Its membership is world wide and anyone who is disabled, pensioned, retired or has a valid reason for not pursuing further the rat race may apply. The resultant certificate makes good wall paper, but what is more important, one finds oneself in good company. I have read the membership list and it includes some worthy names, Ham and otherwise. Many are disabled through war or accident. Its president is confined to a wheel chair, but his endeavours show that along with countless others of this world's limping men that the word defeat is not in his dictionary. The club has its frqs. for rag chewing, etc. If further interested, write to P.L.C., W6DVV, Elmer J. Malone, Pres., P.O. Box 8042, Riverside, California, 92505.

My thanks to the month's contributors: LIDXA, Fla. Dxer, "Air Waves," G3UGT, ZL1HV (Ed. "Break-In"), VE3FXR, VK4UC, VK4PJ, VK3TL, VK4MY. 73, Al VK4SS.

VK CONTEST MEN

Remember your 1966 VK/ZL Contest log must be posted this month. It must arrive in ZL **before** 31st December. Address: N.Z.A.R.T. Contest Manager, 152 Lytton Road, Gisborne, New Zealand.

☆

NEW CALL SIGNS

AUGUST 1966

VK1ZMB—B. J. Mayfield, Reid House, Allard St., Canberra.
VK2BDR—A. M. Brighton, 73 Best St., Wagga Wagga.
VK2BIE—C. S. Shaw, 193 Jamison Rd., Penrith.
VK2BIH—J. H. Thompson, 34 William St., Hornsby.
VK2BKH—K. R. Harvey, 18 Hilltop Cres., Fairlight.
VK2BMG—G. M. Browning, 34 William St., Hornsby.
VK2ZGL—S. G. Leatheam, 31 Arcadia St., Coogee.
VK3AKL—K. S. Hunt, 112 Roslyn St., Middle Brighton.
VK3AYN—H. W. Gilbert, 1 Roseberry St., Hawthorn.
VK3ZKH—G. J. Cohen, 24 Pakington St., Kew.
VK3ZSS—L. De Vries, 167 Lloyd St., Moe.
VK3ZTD—T. D. Ryan, 56 Hillview Ave., Mt. Waverley.
VK3ZUK—B. K. Freer, 7/98 Brighton Rd., Elsternwick.
VK3ZVS A. G. Le Grip, 37 Moorhouse St., East Camberwell.
VK4CM—C. A. Miller, "Lumeah," 26 Grigor St., Moffat Beach, Caloundra.
VK4ZBY—L. Guralnek, 120 Hardgrave Rd., West End, Brisbane.
VK4ZDB—S. R. Brooks, 142 Long St., Toowoomba.
VK4ZJE—J. K. Edwards, 39 Robertson St., Sherwood.
VK4ZWE—W. E. Bennett, 24 Oxford St., Buranda.
VK5ZIA—R. W. Anderson, 9 Stockton St., Elizabeth.
VK5ZMZ—R. M. E. Olesnicky, 25 Edwards St., Colonel Light Gardens.
VK5ZRA—J. A. Cooper, 33 Lincoln Cres., Pooraka.
VK6ZEX—B. C. Campbell, Flat 9, 90 Wanneroo Rd., Tuart Hill.

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★ **TRANSCEIVERS, TR1986-7**
115-145 Mc. Employs heterodyne exciter in tx. TT15 p.a. Single xtal locks Tx and Rx on same frequency. In-built modulator. Supplied with 4.86 Mc. xtal. $30, circuit $1.

★ **MARCONI TF1101 R/C OSCILLATOR**
20 c.p.s. to 200 kc., 1% distortion, current model. $240.

★ **SR550 DUAL CONVERSION COM. RECEIVER**
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100-150 Mc. Complete with tubes, $28.

★ **PERSPEX SHEET**
1/16 inch thick. Size 4¾" x 16". $1 per sheet.

★ **COMMAND TRANSMITTERS**
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★ **TR3624 TRANSMITTER/RECEIVER**
Approximate frequency, 200 Mc. Contains 46 miniature tubes, $30.

★ **3J160E HIGH POWER TRIODES**
120 Mc. full ratings. Heater 10v. 29a., anode max. volts 3000v., anode max. current 1000 mA., r.f. output 2150 watts. $8 each.

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★ **VALVES**
EF50, 20c ea.; 7C7, 10c ea.; CV131, 6CQ6, 50c ea.; 6AC7, 20c ea.; 6AL5, 20c ea.; 6C4, 6AM5, 50c ea.; QQE03/12, $2 ea.

★ **SIGNAL GENERATORS**
TE22 Audio Generator, freq. range: sine 20 c.p.s. to 200 kc., square 20 c.p.s. to 25 kc., in four ranges. Output, 7v. p-peak. Output impedance, 1,000 ohms. Price $42.

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0-500 uA., $5.25; 0-100 uA., $6.95; 0-1 mA., $4.50; 0-10 mA., $4.50; 0-50 mA., $4.50. Full range of Meters and Multi-Testers available.

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UR70 72 ohms, 3/16 inch diam., in 27-yard rolls, $2 plus 75c pack and post. In as-new condition.

★ **RA1B COMMUNICATIONS RECEIVER**
150 Kc. to 15 Mc. in six bands. B.f.o., etc. Genuine original condition, with a.c. power supply, $70.

★ **TRANSISTORS**
Brand new. OC72, OC44, 2N132, OC66, OC45, 80c each. AT1138 Power Transistor, 30w., Class B, $3. Also Diodes: OA71, OA81, OA95, 35c each.

★ **SR700A TRIPLE CONVERSION COM. RECEIVER**
80 metres to 10 metres. 1st and 3rd oscillators xtal controlled, 3.4-4.0 Mc. tunable i.f., selectable sidebands, 85 : 1 geared dial, v.f.o. output for transceive operation, selectivity: 0.5, 1.2, 2.5, 4 kc. Internal 1 Mc. xtal calibrator (xtal supplied). Undoubtedly the finest receiver ever to come out of Japan. $500, 10% discount for cash.

★ **MILLER 455 Kc. PRE-WIRED I.F. STRIPS**
Comprises two i.f. stages, ceramic filter, diode detector, 55 db. gain, NPN silicon transistors, d.c. requirements 6v. d.c. 2 mA., size 1½ x ½ x ½ inch. $8.70 inc. tax.

★ **TR10A MULTIMETERS**
100,000 ohms per volt. Ranges, d.c. volts: 0.5, 2.5, 10, 50, 250, 500, 1K.; a.c. volts: 2.5, 10, 50, 250, 1K; d.c. current: 10 uA., 1 mA., 25 mA., 250 mA., 10 amp.; resistance: 20K, 200K ohms, 2 megohms, 20 megohms. To clear, $25.95.

★ **POTENTIOMETERS**
Wire wound, 40c each; carbon, 25c each.

★ **RESISTORS**
¼ watt, I.R.C., Welwyn, Eire, Ducon, Philips, $2 per 100.

★ **¾ H.P. 2-STROKE MOTORS**
Ohlsson and Rice. Brand new, just imported from America. Weighs only 5¾ lbs. 6,300 r.p.m., supplied with 3 : 1 reduction gearbox, output 2,100 r.p.m. Ideal for driving Alternators for Field Days. Fuel consumption 1 pint per hour. $30.

ANY QUERIES

Beginners are welcome, ask Jim and Laurie Gardiner any questions. They are Amateur Radio operators and will be only too pleased to assist.

★ **CRYSTALS**
Personal shoppers only, $1 each.

★ **SPECIALS**
3AP1 c.r.o. tubes. New in cartons, $1.25.
3000 type Relays, 50c each.
Inter-Office Phones, 15-station type, $4 each.
7-pin skirted Valve Sockets, P.T.F.E. insulation, silver plated, only 20c each, c/w. shield.
Speaker Transformers: 7000 ohms to 2 ohms; 10,000 ohms to 3.5 ohms; 50c each.
9-pin skirted P.T.F.E. Valve Sockets with shield, 50c each.
Irish Recording Tape, Mylar Base: 150 ft. x 3 in., 75c; 900 ft. x 5 in., $2.75; 1150 ft. x 6¾ in., $3.50; 1800 ft. x 7 in., $4.75.
3 uF. 1000v. d.c. Block Capacitors. Only 25c each or $2 per dozen.

★ **MINIATURE CAPACITORS**
New shipment. 600 v.w. Values: 0.001, 0.02, 0.005, 0.0005, 0.0002, 0.0001 uF. $2 for 80, plus freight.

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VHF

Sub-Editor: CYRIL MAUDE, VK3ZCK
2 Clarendon St., Avondale Heights, W.2, Vic.

Well the Festive Season is around again with the Ross Hull Memorial Contest, the VK2 New Year's Field Day and let's hope lots of DX. This will be my last note until February so The Compliments of the Season and the best of DX. How about this for a New Year's resolution: Send in "A.R." notes neatly typed on half a quarto page by 25th of the month. 73, Cyril 3ZCK.

V.H.F. CONTEST/FIELD DAY

The VK2 V.h.f. Group are holding a large scale contest cum field day in N.S.W. over the New Year Week-end. All Divisions are invited to participate in this previously successful contest in which logs have been received from all States of VK and ZL.

The contest will be of three days' duration, i.e. Sat. Dec. 31, Sun Jan. 1, and Mon Jan. 2. It is felt that this gives keen operators a reasonable amount of time in the field. Perhaps interstate V.h.f. Groups could organise stations in their own States to help make this the best yet held.

The times of operation will be as follows: Saturday, 31st Dec., 1700-2100 hrs. E.A.S.T. (0700-1100z 31/12/66) period one. Sunday, 1st Jan., 0500-0900 hrs. E.A.S.T. (1900-2300z 1/1/67) period 2. 1100-1500 hrs. E.A.S.T. (0100-0500z 2/1/67), this section is a message handling contest only. 1700-2100 E.A.S.T. (0700-1100z 2/1/67), period 3. Monday, 2nd Jan., 0500-0900 E.A.S.T. (1900-2300z 2/1/67).

Last year skeds were made with ZLs at 0400 E.A.S.T., the result being a VK-ZL contact. There are three sections for the contest: Section (a), home station open. Section (b), field station—open. Section (c), field station—2 metres only.

Open sections are all bands 144 and up. Six metres is not included owing to peculiar propagation conditions.

Scoring is as follows: For 144 Mc., 0-50 miles, 1 pt.; 50-75 miles, 2 pts.; 75-100 miles, 3 pts.; 100-150 miles, 6 pts.; 150-200 miles, 10 pts.; 200-300 miles, 15 pts.; 300-500 miles, 20 pts.; 500 and up, 40 pts. For 432 and 576 Mc., multiply by two, and for 1296 Mc., multiply by three.

The normal numbering system will apply (e.g. 59003 or 599005 for c.w.). Logs may be submitted for all periods worked, but only one period may be submitted for scoring with the exception of the message handling section, which should be submitted as a separate part of the contest—therefore you may submit a message handling log along with the DX log.

Interested parties should contact the contest committee of the VK2 Group for further details, we would however like to receive from you the following details: Name, Address and Call Sign, proposed location, frequency of operation and expected time of operation—this applies to either home or field stations. The VK2 Group will act as the collection point for all information and will keep all interested parties informed. Please send in details as soon as possible to Mr. P. Carter, VK2ZPC, 5 Bell Place, Mt. Pritchard, N.S.W.

HUNTER RIVER BRANCH

52 Mc.: Things have been quiet for the month of October, the only break throughs so far being the small one reported when Bill 2ZWM hit the jackpot, Channel 0 has been heard often but think this is only Wagga or Bega.

Most of the 52 Mc. boys have been keeping an eye on the band, but nothing so far. The 52 Mc. net is in operation at 10 a.m. Saturdays and Sundays. At times conditions have not been the best, what with the storms and west winds, the band has been noisy. Kev 2ZKW now has his 6146 final going on this band and has tested it with Mac 2ZMO. Luckily for 2ZMO he only had 300v. and not 600v. on it, so you VK5s look out, and bolt down your converters and speakers to the bench. (Note, many VK3s run in excess of 60w. on 6 mx as well.—Ed.) By the time this gets into print, I hope that the band will have been open a number of times. See you all on 52 Mc.!

144 Mc.: The main events this month have been our yearly Convention and Field Day, with our monthly meeting on the Friday night with a competition for home-built gear. This was won by Bill 2ZWM, who described a 6 and 2 mx tx with a common modulator. His prize was a "Radio Designer's Handbook," so now you VK5s can get all the answers from Bill. It is noted that only four took part in the competition, all being Z calls.

On 12th of the month the band opened to Sydney, quite a few were caught unprepared. The lucky ones were Gordon 2ZSG, Bill 2ZWM, Des 2ZDN and a few others, most signals were 9 plus and the band stayed open till fairly late. As far as I know, Des 2ZDN worked Dick 2ZCF on 432 Mc. while the band was open. 73, Mac 2ZMO.

NEW SOUTH WALES

The V.h.f. Group Christmas Party will be held on 10th Dec. at QTH of Joe 2ZOO at 7 Tralee Ave., Killanney Heights, starting at 8.30 p.m. There will be a fox hunt prior to the event—for details of this keep an ear on the broadcast. If you intend coming, please advise 2ZSK or 2ZOO so we know how many to cater for.

By now the path to ZL should have opened again—if last year was any indication. We should be in for some good openings.

It has been noted that attendances at the fox hunts have dropped a bit, so come on you mobile enthusiasts. How about coming along and enjoying yourself for the evening as well as the hot dogs and coffee at the conclusion of the event?

The results for the VK2 V.h.f. R.D. Contest are as follows: 1st, Tony 2ZCT; 2nd, Stephen 2ZSK; 3rd, Col 2YJ; 4th, Arthur 2ZGA. Congratulations to Tony who has done the hat trick with three wins in a row. The trophy for this will be presented to Tony at the Christmas Party.

The October meeting was very well attended, with Keith 2BK lecturing on the uses of laboratory type test equipment. Equipment on display included a spectrum analyser, frequency counter, audio signal generators, and many other pieces of test equipment.

The December meeting will be the Annual Auction Night, which usually draws a good crowd. The January meeting is an open night when anyone can get up and talk on his pet subject or show slides or movies.

The committee would like to hear from any of the country stations who wish to work into Sydney—particularly Orange, Bathurst, Canberra, etc. (Melbourne operators would like to hear from any Sydneyites wishing to work into Melbourne.—Ed.)

Reg 1ZMR is on regularly from Canberra and was portable on Mt. Ainsley with 1ZCG a couple of weeks ago. The signals into Sydney were excellent. 73, 2ZSK.

VICTORIA

Conditions over the month of October have been reasonably good with an excellent opening to VK7 on 2 mx and to all States on 6 mx. I would like to request all VK operators wishing to work ZLs to (a) On 2 mx call with their beams East between 1700 and 1900 E.A.S.T. (2) On 6 mx listen for the ZL Chan. 1 t.v. on 50.75 and call on six metres between 52 and 53 Mc. This little request is from Harry ZL2APC.

It is hoped to have a 6 mx beacon operating from Macquarie Island at the end of 1966. The proposed call sign is VK0KB. Listen to VK3WI Sunday morning broadcasts for further information. 73, Cyril 3ZCK.

SOUTH AUSTRALIA

Strange things are happening it would appear with respect to sporadic E DX on 6 mx. Since the 10th and 11th Sept. not one signal of DX proportions has been heard in VK5, that is if you disregard the Channel 0 transmissions from both VK3 and VK4.

On the local front the main 6 mx activity is provided by the ever-faithful watch dogs on the band and also by W.I.C.E.N. on their net frequency of 53.1 Mc. Geoff 5TY, the co-ordinator for VK5, of recent months has by various means commissioned in excess of 25 mobiles on the net. Numerous exercises have been conducted to improve operating procedures. Nonetheless the results obtained by Geoff have been extremely gratifying. To test the capabilities of the group, an exercise extraordinary was conducted on the long week-end on October 8 and 9. Briefly, the object of the exercise was to conduct message handling between Murray Bridge via Adelaide to Port Pirie, an approx. distance of 150 miles, utilising low power mobiles using only whip antennae, placed at strategic locations. In all, 23 stations participated and although the results were most commendable, many faults were observed in operating procedures. Officers of the E.F.S. observed the exercise and were impressed by what they saw.

On the same week-end. Jim 5ZGV, with Edwin 5ZTS, located at the South Hummocks, received television signals from Maitland 5AO, Rick 5ZFQ and Andrew 5ZBP. stationed portable at Willunga Hill, a distance of 95 miles. Photographed evidence of the received pictures indicate that excellent picture quality was available at the receiving location. The receiving equipment at the Hummocks consisted of a 420 Mc. transistorised converter to a commercial transistorised t.v. rx. The tx used was the home station of Maitland 5AO transported complete to the portable location and powered with a motor generator. Whether or not this constitutes an Australian record for Amateur Television transmissions is incidental as the Amateur T.v. Group are extremely pleased with their results so far and intend raising this distance of 95 miles in the near future. They are also intending to make it a two-way contact.

With respect to 2 mx activity, the only news of any consequence comes from Port Pirie where Jim 5ZMJ is currently using s.s.b. It would appear from results to hand so far that the t.v.i. situation has been minimised and perhaps extended hours of operation from the Pirie district will be available. 73, Colin 5ZHJ.

MT. GAMBIER

The South Eastern Radio Group would like to advise all Amateurs that the June Convention that was postponed will be held over the long week-end at the end of January. Those who registered for the June Convention are automatically registered for the January one, but others can register but no guarantee of accommodation can be made. It is therefore suggested that if you book, first make your own accommodation arrangements. Any further information can be obtained from Colin Hutchesson, 5ZKR, Yahl, via Mt. Gambier.

☆

YOUTH RADIO CLUBS

By the time this is printed, it will be the season of good wishes. I have a few myself. First a load of good wishes to all the brave instructors who weathered the 1966 storms—and also had a lot of pleasure. Then more good wishes to all the W.I.A. administrators who have helped Y.R.S.—they will be happy with the end result. Special good wishes to Rex 2YA who has given so much for years before 1966. Special good wishes to the young graduates of Y.R.S. who are giving back to the scheme some of the help they were given—in some cases more. Finally, good wishes to all the budding electronic experts—they'll always enjoy it. I should perhaps add a few best wishes to my four readers over the past few years—I'm hoping this is my last effort at these notes—personal matters are pressing hard for time. Y.R.S. will continue to expand and a future correspondent will have plenty of events to chronicle.

The Articles of Association of the Youth Radio Clubs Scheme of Australia (Victorian Division) has been printed and no doubt Howard Rider will discuss the idea or send you a copy if you get in touch. This new development should be watched with interest. Certainly Howard and his committee are very keen and much good work is sure to follow.

Young graduates of Y.R.S. in VK2 are putting a great deal back into the scheme, particularly Roger 1RD and Susan 2BSB. Roger is not only instructor on Friday nights for a Canberra group of Y.R.S., but also puts a lot of work (with help from Susan) into producing the "PG3 and PG4 Bulletin," running from 4 to 12 pages and containing a lot of news and hints—4 cents a copy. Roger has also prepared a correspondence course for Junior Certificate. This contains a lot of theory notes (although of course being 29 pages, is not a text book), a set of assignment questions and other necessary comments on theory and practical sections of Junior. This was mainly prepared for use by members of Roger's Postal Group but is very likely to be suitable for clubs. Anyone who wants a copy (especially new club leaders who would like to see how another club is instructed) should send 40 cents to Roger (only with 4 cent stamps).

This raises the point of expenses. Costs are mounting as the scheme expands. There are two possibilities at the moment—one is to charge fees for registration, instruction and examination (and we must remember that very often a free service is not valued), and the other is to get many or large donations. At the very least, donations of stamps could be sent back to the Division or group which sends out material. Christmas Island Club donated £3/11/6—why can't others give something?

I hope I'm not doing a Nellie Melba farewell, but I will again say "Cheers" to my four readers and best wishes to the new correspondent. 73, Ken 1KM.

SWL

Sub-Editor: D. GRANTLEY, WIA-L2022
P.O. Box 222, Penrith, N.S.W.

The highlight of October listening was the VK/ZL Contest, and although I personally did not participate in the phone week-end due to other commitments, conditions over the c.w. period indicated that there will be some high scores once again. To me the greatest surprise was the breakthrough on 15 metres on Sunday of the c.w. period. This band was open here from 7 a.m. to 7 p.m., with loads of good DX. One hesitates to mention an individual performance amongst the transmitting stations in an event such as this, where it is possible (as I did) to go through the entire week-end and not hear a call from other than the Eastern States. But at the risk of repeating myself, I must congratulate Dave 2EO for an outstanding performance on c.w., and for his fine operating.

QUERY SERVICE

A couple of months ago I mentioned that Harry Major is able to provide copies of circuits, etc., and gave all the details. However I failed to give you his address. It is: Harry Major, WIA-L3102, 30 Seaton St., Glen Iris, S.E.6., Vic. I can recommend these copies, they are clear and really well done.

AROUND THE SHACKS

Often when a member takes on a special office with the Institute, so much of his time is taken up in fulfilling his task that operating time is sadly reduced. This unfortunately applies to Eric L3042, but despite his long hours with QSL handling, Eric's log book still increases at a state which would put all of us to shame. Some of the loggings for Oct., all of which on c.w., were: 80 mx—W2GWE; 40 mx—Eric heard over 100 Europeans, plus KH6IJ, KL7FRY, PY1CSF, VR2DK, VE7VC, IS1PEM, JA1EVY/MM, K3WWE/MM, 4X4QA, and 6Y5BB, the latter making his appearance at 0715z. 20 mx again proved to have plenty of good ones including FH8AH, HK3RQ, LU-6DJK, KL7FRY, KP4BBN, OX3BX, KX6ER, OA4VE, OA4PF, OD5LX, PT1LDG, OD5EE, TI2LZ, ZC4GB, VK0MI, and VR4CR. 15 mx, if I remember correctly, is rarely frequented by Eric, who can keep himself fully occupied on 40 and 20, however this month is an exception and loggings of JA1AB, JA1THL, W5BRR, W6LCX, W6ITA and WB6GMN were made. Inward QSLs for L3042 were CR6BK, EA7ME, UA2CA, LU8BAJ, KH6FLC, SV0WKK, YV5ACP, 4X4ON, 5A1TY, W2AIW/MM, VE8WT, plus the following which were the result of 80 mx reports: UA9KMB, UA0KKC, UB5ARTEK, UB-5KDS, W3KUN and W9GL. Thanks Eric for a swell report and I trust you get into the DX which is coming through on 15 at present.

Mac Hilliard has been active in s.w.l. circles for many years and as most of you know is very interested in reception on the higher frequencies. Thus he was delighted last week to catch a breakthrough on 20 mx, when in a moderate period, he was able to log all W call areas, plus many stations in the Islands and also UW0. Mac tells me that it was the best opening on 10 in the last four years or so, and is hopeful of this band coming good in 1967. The overseas reports coming in here indicate that there have been good loggings made on this band in G land and other parts of the globe.

On the home front here at L2022, I have been rather inactive other than for the c.w. section of the VK/ZL Contest, which as I mentioned earlier, was highlighted by the activity on 15 mx. Some loggings on that band on c.w. were: KW6DS, CP5EZ, VK9GN, VR2DK, all W and JA call areas and HK3RQ. To give you an idea of the way this band was coming in, I turned to 21 at 2107 and by 0200z, less two hours when I had to go out, I claimed 3500 points. This, despite the easy scoring system, goes to show that this band can be fantastic when the right conditions (and operators) are about. 20 mx has been very good and the usual Europeans plus HK3, PY2, OA4, OD5 and many others were heard. 40 mx was quite active here during the contest, but unfortunately the commercials made it hard to hear the DX, nevertheless OZ1LO and a number of K, VE and JAs swelled the score a little. 4X4WN, OZ5DK and CE9AS were heard at other times, whilst JT1AG appeared on 20 c.w. working into VK2. A good month, with the promise of an excellent summer period.

Greg Johnston, our VK7 listener and QSL Manager for VK0MI, has been listening on 20 c.w. and heard HR1AT, OA8D/3, ON5ZO, ZC-4TX and several OKs, and on s.s.b. DJs, FB-8YY (Adelie Isld.), KP4CL, LA1KI, LA5YE, OH4OO, PA0HBO, PA0XPQ, SM2BLA, TI4JP, VK0MI, YS1SRD, 4X4JU plus the three DX-peditions PY0XA, K1IMP/KC4 and W9WNV/HK0. Greg will be returning to VK0 for another short period at the end of this year.

Ernie Luff, L5080, is still reaping the benefit of his AR88D and this month has heard the following prefixes on 20 mx s.s.b. and a.m.: EA3, VQ8, UF6, UG6, HZ1, OA, TG9, CR6, XE, YU, ON4, OE2, M1B, GI3, EI4, PJ5, EP2, 9Q5, 7Q7, ZS6 and a great many more common ones. Ernie's list was dated early October, thus it is most likely that his overall score of countries heard has increased by this time from the 173/94 at that date. Newest cards received by him were W0ZTL, KC4USB with VK5GD for a top-band report.

From Bernard Hughes in London I received an interesting tape with a recording of a QSO on 10 mx between a DJ and a PY4 on s.s.b. The recording was taken in Worcester, U.K., and if this copy is a sample of the doings on ten metres, then it explains the very high scoring of European and W s.w.l's on this band. For instance, in this month's all-band post-war table, the highest single s.w.l. score on 10 mx is 220 countries by a GM listener, a W has heard 207, whilst six more have scores ranging from 110 to 184. The top scorer for this band does not operate c.w.

At one time or another our equipment lets us down, and this month it is Bryan Prosser, L6028, whose Murphy decided that it was time to expire. We don't hear much from Maurie Cox these days, due to studies and outside interests. It is necessary, due to certain conditions prevailing in Sydney, that I cut short the personal news at this date, Oct. 23. I must apologise to any individual member and also to the various groups for taking this action, but I assure you it is necessary. Letters were also received from Al 4SS, whilst tapes are acknowledged from Bryan Prosser, Doug Head, Mac Hilliard, Bernard Hughes and John Simons.

DX NEWS

Firstly, in reply to a query which I made to the I.S.W.L. boys re cards from the Don Miller DX-peditions, thus far none have been seen by these chaps. G6FU is requesting reports from s.w.l's who hear his transmissions. IR1REE was at the Radio and Electronics Exhibition in Rome and asks for his reports to be sent to Box 361, Rome. The station ID1IDA, which was the subject of discussion here recently when operating on June 25-27, was situated on an oil rig 16 kilometres east of Ravenna, Italy. Activity from TF2WI and 2WJ are strongly suspect. TG9EP will answer all s.w.l. reports, provided they contain the name of the station which he is working. As a matter of interest, this operator is particularly helpful, as he tries to come on the air for about quarter of an hour during every I.S.W.L. "Set Listening Period" in order that s.w.l's can have a chance of hearing this country. (These S.L.P. contests are held periodically, at a given time on a given band and mode, the aim is to receive as many countries as possible in that period. Usually about two hours.)

TA2BK QSLs go to DJ2PJ. More stations for the W2CTN list are YS1IM, YS1RS, VP-6PJ, CR3KD, CX9AAN, HC1GC and HK2YO. Cards for DJ6QT/LX LX2UW and ZD9BE go to Box 7388, Newark, N.J., 07017, U.S.A. The following stations are new members of the I.S.W.L. and reports to them can be passed through their bureau: W8EVZ, WB6DQX, KV-4CI, G3ETU, W2ONK, W9CBD, VE8WT, VE2BV, K1IMP and K5DYD. YA1FY can be QSL'ed per Box 711, Hollins College, Virginia, U.S.A. HC2MV can be reached at Cas 611, Guayaquil, whilst another Eucadorian HC5BJ hails from Box 790, Cuena. VP8CW is at Box 188, Port Stanley, Falkland Isld. (Tnx Monitor.)

A note here in a copy of Monitor just arrived, to the effect that HI8JSM will QSL 100 per cent. all s.w.l. reports which are completely accurate. Also that JW is the new prefix for Svalbard, with JX likewise for Jan Mayen. This will overcome the trouble we have had in the past when trying to identify these LA/P stations.

SUMMARY

As we come to the end of another year, we can look back over 1966 and remember several highlights. The year has been marked, particularly in VK2 and VK3, by better attended s.w.l. meetings. At this stage I would like to thank Chris Middleton-Williams for the time and trouble he has taken in his position as Secretary of the VK2 Group. Due to my geographical situation, and the nature of my job, I have been unable to attend any of the VK2 meetings, but members have commented favourably on the "doings" in VK2.

The introduction finally of the VK D.X.C.C. for s.w.l's late last year has given some of our boys a little more incentive to climb the ladder. However, to date only four have been issued, Eric Trebilcock (VK3), Don Grantley (VK2), Warwick Smith (VK3) and Chas Thorpe (VK4). I feel that number five is just around the corner, for a note from Ernie Luff this morning reveals that he has now 103 confirmations. Congratulations Ernie.

Two of our listeners have entered their National Service training, our top VK6 Peter Drew, who at present is up here at Ingleburn, and Barry Snell of VK3, who is at the time of writing, in Queensland. I had hoped that either Eric or myself would have become the first VK s.w.l. to reach the elusive "300 heard" mark, but they are few and far between when you get up there. Unfortunately, I have in the last few weeks missed two or possibly three DX-peditions which would have done the trick, but it was not to be. There is always next year and the year after—etc.

I would like to extend our thanks to Bernard Hughes, John Simons, Doug Head, Roy Waite and Bob Fowler for taped information from I.S.W.L. sources, and also to Bryan Prosser, Mac Hilliard and Alan Raftery for their regular reports. To all my regular and irregular reporters I would like to take this opportunity of thanking you for writing and furnishing information which is necessary for the compilation of this page and I would like also to mention Chas Aberneathy and Syd Underwood who regularly get dragged to the telephone in the middle of their evening meal, also Mac who once or twice each week has to climb out from under a switchboard to answer some query. Finally, to Ken and the Publications Committee, I thank you for your assistance and co-operation, and I would like to point out here that if any of you consider that our page has been cut short, it has never been pruned by the editor or the committee who have regularly given all the space asked for—only lack of information has caused me to cut down.

To all mentioned afore by name or implication, and to licensed operators and s.w.l's alike who have provided technical advice, etc., I would like to take the opportunity to thank you and wishing you all a most happy Christmas and may 1967 bring joy and happiness—and better DX. Should anybody be passing through the Blue Mountains over this period, stop at Hazelbrook, ask somebody where Camp Fletcher is, and call in and say hello. 73, Don L2022.

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FEDERAL AND DIVISIONAL MONTHLY NEWS REPORTS

(SEND CORRESPONDENCE DIRECT TO DIVISIONAL REPORTER NAMED AT PARA. END)

FEDERAL QSL BUREAU

Rex Glew, ex ZL2ASM, now resident in Moorabbin, Vic., with the call sign VK3ASQ, has been successful in obtaining his old call letters and shortly will sign VK3ASM.

Bob W4CHA expects to be active from Norfolk Island for several months commencing end of January 1967. Call sign to be used is not yet known.

The V.R.Z.A. (Society of Radio Amateurs in the Netherlands, founded in 1951) is a non-commercial radio society for the promotion and co-ordination of two-way Amateur Radio communication. Almost all Dutch active and DXing Hams are members of this Society.

The V.R.Z.A. PA QSL Bureau forwards QSLs to ALL Dutch Radio Amateurs (members or non-members of the Society), monthly, and free of charge. The other Dutch QSL Bureau (V.E.R.O.N. of Rotterdam) sends the QSLs for non-members only twice a year, in June and December, which gives a long delay.

All cards for the Netherlands (PA, PE and PI stations) as well as for the Netherlands Antilles (PJ stations) and Surinam (PZ stations) may be sent via PA QSL Bureau, V.R.Z.A., Post Box 190, Groningen, Holland.

Following are the details of the Tenerife Etornal Springs Paradise Certificate for which five QSOs with the Canary Islands are needed in the period stated: Starts 0000 G.M.T. Dec. 21, 1966, ends at 2400 G.M.T., March 20, 1967. During each QSO local **maximum** and **minimum temperatures** of each station shall be mentioned and shall be also mentioned on the corresponding QSL. All modes of operation (c.w., a.m., s.s.b.) and assigned frequencies can be used. QSLs to be sent to P.O. Box 215, Santa Cruz de Tenerife, Canary Islands, Spain.

K.A.R.L. News says: "Recently, HM1BU call has been heard mostly on 20 mx band s.s.b. HM1BU was licensed about 3 years ago, but his licence was expired as the date of Dec. 31, 1965. He did not renew his licence and the call of HM1BU was disappeared. Now, HM1BU call is transmitted by the KWM-2 from a small island in the west sea of Korea, but it is the illegal operation. K.A.R.L. warned him by the letters not to operate illegally and to obtain the new licence. So, K.A.R.L. advice to Ham stations all over the world not to contact with HM1BU for a while until he gets the new licence. K.A.R.L. does not handle the QSLs to and from HM1BU."

—Ray Jones, VK3RJ, Manager.

— . . . —

NEW SOUTH WALES

The Wireless Institute Centre was comfortably filled by members and visitors on Friday evening, 28th Oct., the occasion being the usual monthly meeting combined with the official opening of the John Peell Memorial Library.

President Tom 2OD occupied the chair and extended a hearty welcome to all. Among the visitors were Mrs. Peell and party, which included Miss Hardy, Mr. and Mrs. Peell and Mrs. Toohey; Mr. and Mrs. Stracey (who had donated to the Division a large number of text books, "QSTs," etc., left by the late Wal Ryan, VK2TI, as well as a handsome silver cup that was won in the 1938 VK-ZL Contest by a N.S.W. team); Mrs. McLeod (widow of the late Gordon McLeod, VK2ADC), who has donated to the Division the technical library owned by her husband. Also at the meeting was Don Wallace, W6AM, well known to the DX fraternity.

The following applicants were welcomed into membership of the Institute: Gordon Clapp, Patrick C. Bennett, Peter J. Shannon, Geoffrey E. Bailey, Gilbert Armstrong, R. W. Walker, and the following Associates: Noel Wayne Gibson, Daniel Adrian Clift, Allan Lloyd Riddle, A. C. M. Anderson, Kevin Clive Hutchinson, Joe Pietras, Kendall Young.

At this stage an adjournment was made to the room where the John Peell Memorial Library had been installed. It will be remembered that last year the Council then in office had received a donation from John Peell (VK2WJ) following the auction of his gear. Following his death shortly afterwards, Council decided that this money should be used to establish a memorial library. Much preliminary "spadework" was carried out and it is very gratifying, particularly to those who interested themselves in this project, to see that the present Council has been able to bring it to finality.

The very attractive cabinet occupies almost the whole of one wall of the centre room at W.I.C. The lower half has stained wooden doors, with plate-glass doors above. Councillor Charlie Wilkins, in his usual quiet way of working more than talking, has spent much time on the decor of the room and the whole effect brought forth much favourable comment.

After brief remarks by the President and Senior Vice-President on the purpose of the function and the history of the project, Mrs. Peell handed over the key of the library. In doing so, she expressed her thanks and appreciation to Divisional Council for the invitation to attend, and trusted that members of the Institute would derive much benefit and pleasure from the books that the library contained.

In accepting the key on behalf of the Division, President Tom said that, thanks to the many generous donations of books, the new cabinet was almost full and it appeared that a branch library would have to be opened shortly. He paid tribute to the librarian, Keith de Haan (VK2UE) and his assistant, Phil Tavares (VK2ATA), for their efforts in sorting and cataloging books.

It was announced later that a set of rules would be formulated shortly to cover the borrowing of books from the library, and these will be published for the guidance of members immediately they come to hand.

The lecturer for the evening was Syd 2SG, who spoke for approximately two hours on "Television Techniques." The subject is such a vast one that even in a lecture time about double the usual length, Syd did very well to cover so much ground. The research necessary for such a lecture must have been colossal and his remarks, while very interesting to all members, would be particularly useful to those who are themselves working in the field of television and broadcasting in general.

As the writer of these notes had to leave the meeting early to attend another function, we must record our thanks to Stan 2ZRD for jotting down the main details of the lecture.

Syd began by giving a description of the optical system of television cameras and different types of lenses—zoom, telephoto, etc., and various methods of lighting—artistic, illusion, realism, sunlight, and lighting of the human form. In a large studio there would be from 50 to 100 kilowatts of light. A high quality telephoto lens could give a good picture at a distance of one mile from the camera.

On the electronic side of television, descriptions were given of the operation and usage of the image opthicon in studio cameras, and likewise the vidicon in the broadcast camera for outdoor operation. All descriptions were illustrated by colour slides showing the "works" of the Marconi Mk. IV. camera.

Then followed a section on camera control unit, vision mixing and vision distribution amplifiers, which included a "lecture within a lecture" on multi-vibrators. A central apparatus room was described with slides, showing both valve and transistor-operated shaping and line amplifiers. Syd then gave details of automated switching of telecine chains, studios, slide monoscopes, etc., and amazed the audience by stating that a television station could be operated by four persons, mainly with the aid of push-button control. Automation performed the correct sequence of technical operation to produce the pre-arranged programme.

Some excellent shots were shown of the Ampex VR2000 video tape recorder, an amazing piece of apparatus which enables video tape to be edited virtually automatically. Further slides and descriptions covered a typical studio set, distribution amplifiers, and sketches of individual sections of television apparatus.

Syd's lecture was given in the usual VK2SG racy manner, and he fully deserved the acclamation of the audience following the vote of thanks moved by Stan 2ZRD.

SILENT KEY

It is with deep regret that we record the passing of:

Ex VK2NO—Don Knock

W.I.C.E.N. NEWS

Peter 2AXJ, the W.I.C.E.N. publicity officer, says that since the publication of the net frequencies in the monthly Bulletin he has received many inquiries regarding the 2 mx Channel C f.m. net frequency. The correct frequency for VK2 is as published for Channel C, that is, 146.100 Mc. All crystal frequencies published are based on this. It will be noticed that this channel does not agree with that used in VK3, and Peter thinks this is where the confusion has arisen. However, it will be noted that Channels A and B do agree with those used in VK3, so that people travelling interstate will be able to operate on the interstate net.

GENERAL NEWS

The Federal Councillor (Pierce Healy, 2APQ) reported that he had represented Divisional Council at the South-West Zone Convention over the October holiday week-end. Fifty-two people attended the dinner and the day events were also well patronised. The official con-

VK2 DIVISION

Radio Equipment Store

We would like to wish all readers the Compliments of the Season. You will find a list below of some HC6U crystals. Some of the FT243 series which have been featured over the past few months are now in short supply so please advise second choices where possible. Many inquiries for teletype were received this year and several units have been sent interstate. Inquiries still welcomed as we may still have something that will suit your requirements.

The catalogue is to be revised early next year. If you have found it hard to obtain coil formers we now have quite an extensive range in 4 mm. and 7 mm. formers with cans, tag rings and slugs to suit.

Merry Christmas and a Happy New Year.

—R.E.S. Committee.

CRYSTALS

In HC6U holders, $1 each, limited numbers in most cases: 7586, 8964, 8971, 8977, 9044, 9051, 9057, 10,042, 10,780, 12,093, 13,930, 13,940, 13,950, 13,970, 14,050, 14,060, 14,070, 25,193 kc.

TAPED LECTURES

21. V.h.f. Aerials, 1 hr., 32 slides, H. Burtoft, VK2AAH.
22. A Field Day with a Difference, 1 hr., 34 slides, Eric Warren.
23. Principles of A.g.c., 77 mins., 20 slides, Bob Winch, VK2OA.
24. S.s.b. and C.w./A.g.c., 73 mins. 14 slides, Bob Winch, VK2OA.
25. A New Look at Radiation, 90 mins., 30 slides, Joe Reed, VK2JR.

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vention station, 2WG, was active over the week-end and aroused the interest of the Wagga City Council's representative (Ald. R. J. Harris). He said the fact that a radio network was available for use in times of emergency was very reassuring.

Pierce also released details of this year's Remembrance Day Contest. As the results of this contest will be published before these notes appear in print, we will confine our remarks to offering congratulations to the VK6 Division for their win; also to the following VK1 and VK2 State section winners: Phone—VK1QL (610 pts.), VK2XA (675 pts.); C.w.—VK2QL (493 pts.); Open—VK1DA (433 pts.), VK2AHM (1304 pts.); V.h.f.—VK2ZCF (84 pts.), also first in Commonwealth; Receiving—VK1, J. Hurran (375 pts.), VK2, A. Nutley (1083 pts.).

Keith 2AKX said that there was an attendance of over 50 at the Hunter Branch annual Convention in October, and the field day was also well patronised. Divisional Council was represented at the dinner by Cyril 2CH, while two other councillors (Peter 2AXJ and Stan 2ZRD) as well as the secretary/treasurer (Mrs. Betty Gerdes) with OM, Barry 2ZAH, attended the field day. Keith went on to say that the Hunter Branch will hold another field day on 4th Dec., at Bolton Point Park. There will be the usual events, but on this occasion there will be a more informal atmosphere. Visitors from Sydney and other areas would, as usual, be very welcome.

As reported in previous notes, Syd 2SG had tendered his resignation from the position of QSL officer, after a period of seven years in office. At the October meeting it was announced that from 25th Nov. inwards QSL cards will be handled by Roger 2ZIG, with the outwards cards still being dealt with by Ted 2ACD. The well known G.P.O. Box No. 1734 would be retained. Following the above announcement, Bill 2YB moved that a hearty vote of thanks be accorded Syd for his good work on behalf of the Division, and this was carried by acclamation.

The Education Officer, Harold 2AAH, advises that he has arranged a selection of films for the December meeting. Members are asked to take special note that this meeting will be held on the third Friday, the 16th, and not the fourth Friday, as in other months. The December meeting is a family night, so take Mum and the Harmonics along for a night out.

As this will be the last issue for 1966, may I wish all my readers a Merry and Safe Christmas, with health, prosperity and good DX during the coming year. 73, Ivan 2AIM.

HUNTER BRANCH

The November meeting of the Branch, held at the Technical College, was addressed by Ian 2AZN, of the staff of "Electronics". Ian gave a detailed and very interesting talk on the new s.s.b. transmitter which he has designed, to be featured in the magazine this month. The unit uses 21 transistors and two valves and can operate all h.f. bands except 160 mx, either upper or lower s.b. From questions which followed the lecture, it was evident that members had thoroughly enjoyed the visit by Ian and were anxious to find out as many things as possible about the new unit. Stuart 2AYF expressed the thoughts of the members in his vote of thanks which was carried by hearty acclamation.

There was a further sale of some hard drawn aluminium rods suitable for v.h.f. beams and this has resulted in more money being made available for the Branch contribution to the I.T.U. fund. A quite pleasing amount has now been put aside for this purpose and the final sum is to be transmitted to the Divisional headquarters at the end of the month.

Quite a deal of activity on both h.f. and v.h.f. has been noticed during the last few weeks, possibly due to the conditions which now exist regarding our friends in the P.M.G. Department. Some members have recently had quite close contact with the gentlemen concerned, but it appears that thay have escaped unscathed in most cases. It is to be hoped that this position is maintained.

Troubles have been the order of the day with 2AWX of late and it has been increasingly difficult to hear the broadcasts. Men who know all about these things report that much work is going on to improve the position and it is expected that soon the reliable signal of former days will return. Until then, anything might, and probably will, happen.

On v.h.f., some good 6 mx openings have appeared during the month and both Bill 2ZWM and Kevin 2ZKW report interstate contacts a plenty, so I suppose the others of us on this band have had the same success. Des 2ZDN, who uses his vertical collinear to monitor DX t.v., raced to the shack a week or so back when he heard what appeared to be an opening. He scored again, making solid contact both ways with Dick 2ZCF on 432. The reliability of this frequency between the two cities appears to be improving and the chaps just mentioned have fairly regular contacts.

Nobody in the Branch area appears to have hit the high spots in the R.D. Contest, but Geoff 2BGF from Taree was up among the leaders and quite a number of Newcastle and district stations took part although I suspect that they forgot to send their logs in. One good excuse was the incidence of the 'flu during that week-end, and many a good man was laid low by it. Belmont Bob scored well in another activity, the Scout Jamboree-on-the-Air and so impressed the Mayfield boys who visited him that he has agreed to their request that he become official signalling instructor at the Scout Hall. Bob is looking for a cheap 122, ZC1 or similar for this purpose so that 2BOB/P may go on the air. Perhaps you may be able to help him.

Another of the club members, Susan 2BSB is about to commence operation on 146 f.m. with a carphone as soon as crystals arrive for the unit. Jan 2BJO has made the necessary conversion and the set plays but the arrival of crystals will put Susan on the air from home. John Bedford still awaits his call sign so that he too can go on the v.h.f. bands.

And guess what, 2AKX has done it again. Another card, from Malaya this time, has arrived to add to the collection for those 14 meg. c.w. contacts. Just a few more to go and I'll have the DXCC-pirate. Whoever uses the call sign certainly has some contacts! Please sir, show yourself, patch, cork leg and all, and I'll let you have them.

In case the postal authorities or whoever, allows you to read this before the end of December, you will please note dear reader, some interesting facts about coming events. The next meeting of the Branch will be at the usual place, Room 6, Clegg Building, Newcastle Tech. College, on Friday, 2nd Dec. Lionel 2CS is to show some slides of a recent trip overseas and supper—I have been looking forward to this all year! The Sunday following there will be a Field Day at Bolton Point Park with no charge for admission—you know, Christmas and all that, and finally, but perhaps most important, there is no meeting in January. The first meeting in 1967 will be on Friday, 3rd Feb., 1967, which, although you may not know it, is not far off. So it remains only to say, Happy Christmas, good DX, Prosperous New Year, and all the best from President and fellow members of the Hunter Branch, including your scribe, 2AKX.

CENTRAL COAST

The last meeting of the Central Coast Branch was held on Oct. 21 at the Gosford School of Arts. Ernie 2EH gave a very interesting illustrated talk on his recent trip to the South Pacific which had everyone mentally planning a future excursion to similar places. Honiara seemed to be the most interesting port-of-call and from the pictures was certainly very beautiful.

We had several visitors from Newcastle and Sydney and, as usual, it was a most enjoyable evening. The final natter over a cup of tea and home-made goodies tops off the meeting.

We have had word from Phil 2TX, who is travelling with his XYL somewhere in the Middle East. He had a few days in Bombay and was able to meet a few Hams. He says that during the monsoons they take down their quads (I wonder why?) and then re-erect them after the blow is over.

Our Field Day will be held at Gosford in mid February 1967. It will be at the usual place and the definite date will be announced in December. This is always a popular day and as Gosford is a delightful tourist town situated on Brisbane Water, the day offers many attractions for all the family. All activities and meals are included in the entry fee.

Happy to report that Muriel 2AIA is feeling much better and spends a little time on the air now. 73, Mona 2AXS.

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OBITUARY

DONALD BRADER KNOCK (Ex VK2NO)

As we go to press we learn with much regret that Donald Brader Knock (Ex VK2NO) had passed away in hospital on 31st October, following a lengthy illness.

Undoubtedly it would be true to say that both the name Don Knock and the call sign VK2NO became one of the best known combinations among Amateurs in this country, particularly among those whose association with Amateur Radio goes back prior to World War II.

Borr in Southport, Lancashire, 68 years ago, Don saw service in World War I. Being an adventuresome type, he joined the 1919 expedition to Russia in what proved to be an abortive attempt to overthrow the Bolsheviks who had taken over the country following the Russian Rebellion.

Having served with the Engineers, with emphasis on radio communication, Don took out a G call on his return to England in the early 1920s.

Arriving in Australia around 1925, he undertook the organisation of radio communication for the Vestey Meat Company at Wyndham, Western Australia, and his efforts there resulted in considerable progress being made in opening up the North-West.

Another of Don's interests was radio journalism and he continued a rather chequered career by publishing a monthly magazine, "Radio News," and also became Radio Editor of the Sydney Bulletin. A post-war attempt to re-enter the radio magazine field was, however, short lived. Still later, he was employed by Philips Electrical Industries and in a civilian capacity with the Department of the Navy.

About 10 years prior to his death, Don surprised his friends by disposing of his gear and relinquishing his call sign. However, he continued to take an interest in Amateur doings, in spite of a deterioration in his health.

Perhaps we could say that one of Don Knock's greatest contributions to Amateur Radio was in v.h.f., for during the 1930s, he and other kindred souls carried out much pioneering work on 56 Mc. An early edition of the A.R.R.L. Antenna Handbook carries a description and photograph of a 56 Mc. beam antenna developed by him.

The N.S.W. Division of the W.I.A. was well represented at the funeral on Thursday, 3rd Nov., which took place at Eastern Suburbs Crematorium following a service at St. Mary's Church of England, Waverley.

To Mrs. Knock and son, Rodney, may we offer sincere sympathy on behalf of all members of the Wireless Institute of Australia.

VICTORIA

I.T.U. FUND ACKNOWLEDGMENTS

A. K. Ballantyne, 3AKB, $4; J. Humphreys, 3ANH, $2.15; G. Sutherland, 3ZSU, $2; V.R.I. Wireless Club, 3RI, $2; G. Gillingham, $2; D. Long, 3ZVL, $2.

WESTERN ZONE

Of major importance in our notes this month is a report on the proceedings of our Annual Convention which was this year held at Bordertown, S.A. The combined gathering of Amateurs from VK3 and VK5 was a most successful affair which attracted members from Adelaide, Melbourne, Warrnambool, Mt. Gambier and a good roll-up from our own Zone.

The initial point of convergance was the home of Tony 5ZAI, where the hungry travellers—some arriving by aeroplane and motorbike—made good use of Tony's splendid barbecue facilities. It was not quite warm enough to try out the swimming pool though Tony! Bob 3ARM had set up his h.f. gear to talk in the mobiles and 2 mx carphones also served to augment this facility. Tony's v.h.f. shack attracted a lot of admirers with the set-up reminiscent of a N.A.S.A. tracking station.

At the Annual General Meeting, Bill 3ZAX was elected our new Secretary, allowing Bill 3AKW (our Secretary for the past 15 years or so) to step down for a well earned rest.

A.O.C.P. THEORY CLASS

The Victorian Division of the W.I.A. will commence a **theory class** in February 1967.

Those wishing to enrol should do so immediately by contacting the Administrative Secretary, P.O. Box 36, East Melbourne, or by phoning 41-3535.

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1C7	50c	5Y3	$1.38	6G8G	$2.60	12A6	50c	955	50c		
1D4	75c	5Y4	75c	6H6GT & Metal,		12AH7	50c	956	50c		
1D8	75c	5Z3	$1.75	20c, 12 for $2		12AT7	75c	985A	50c, 5—$2		
1F5	$1.00	6A3	75c	6J5GT	$1.00	12AU7	$1.50	1616	$1.50		
1H5	75c	6A6	75c	6J6	75c, 3—$2	12AU7A	$1.50	1625	50c, 5—$2		
1K5	50c	6AB7	$1.00	6J7G	50c, 5—$2	12AV6	75c	1626	50c		
1K7	50c	6AC7	50c, 5—$2	6K6	$1.00	12BE6	75c	1629	50c		
1L4	50c	6AG5	50c	6K7	50c	12C8	50c	5636	75c		
1L5	$1.00	6AG7	$1.25	6K8GT	$1.25	12J5	50c	5763	$2.80		
1LN5	50c	6AJ5	75c	6K8 Metal	$2.00	12SA7GT	$1.00	6021	$1.00		
1M4	50c	6AK5	$1.50	6L7	50c	12SC7	50c	9004	50c		
1M5	50c	6AL5	$1.40	6N7	50c	12SG7	75c	EA50	10c, 10—$1		
1P5	50c	6AM5	$1.50	6R7	75c	12SK7	50c	ECC35	$2.00		
1Q5	50c	6AM6	$1.00	6S5	75c	12SN7	75c	ECH33	$2.00		
1R5	$1.90	6AN7A	$1.65	6SA7	75c	12SQ7	50c	ECH35	75c		
1S2	$1.75	6AR7GT	$2.10	6SC7	75c	12SR7	50c, 5—$2	EF39	50c		
1S5	$1.60	6AS7GT	$2.00	6SF5	75c	16A5	$1.70	EF86	$1.85		
1T4	$1.00	6AU6	$1.45	6SF7	75c	16A8	$2.10	EY91	50c		
1U4	$1.60	6AU8A	$2.40	6SH7	50c, 5—$2	25L6	$1.00	KT66	$3.00		
1U5	$1.60	6AV6	$1.40	6SJ7	75c, 3—$2	25Z6	$1.00	QQE03/12	$4.75		
2A5	75c	6B6	75c	6SK7GT	$2.00	35L6GT	$1.00	QVE04/7	$2.50		
2A7	75c	6BA6	$1.55	6SL7GT	$1.25	19	50c	RL18	75c, 3—$2		
2C26	50c, 5—$2	6BE6	$1.55	6SN7GT	$1.00	30	50c	UL41	$1.00		
2D21	$1.20	6BL8	$1.80	6SQ7GT	$2.60	47	50c	UR53	50c		
2E26	$2.50	6BM8	$1.85	6SS7	75c	57	50c	VCR97	5.00		
2X2	50c	6BQ5	$1.70	6U5	$1.85	58	50c	VR53	50c		
3A4	$2.20	6BR5	$1.45	6U7G	50c, 5—$2	80	$1.70	VR102	50c		
3A5	$1.00	6BX6	$1.45	6U8	$1.70	84	50c, 5—$2	VR135	50c		
3Q5	$1.00	6BY7	$1.45	6V4	$1.14	100TH	3.00	VR136	50c		
3S4	$1.00	6BZ6	$1.60	6V6GT	$1.75	717A	75c	VR137	50c		
3V4	$1.50	6C6	50c	6X4	$1.00	807	$3.75	VR150	$1.25		
5AR4	$2.60	6C8	$1.00	6X5	$1.45	808	$1.00	VT78 (6D6)	50c		
5AS4	$1.45	6CG7	$1.55	7A8	35c, 8—$2	809	$2.00	VT127	50c, 5—$2		
5BP1	5.00	6CH6	$2.35	7C5	50c, 5—$2	830B	$1.50	VT501	75c		
		6CM5	$2.25	7C7	50c	832A	$6.00	VU39A	50c		
				7E6	35c, 8—$2	837	$2.00				

TRANSCEIVER

TR1987, English (later version of SCR522). 15 watts, 21 Valves. Freq. coverage: 115 to 145 Mc. Crystal locked receiver. Transmitter uses TT15 output valves. Three stage exciter using 4.86 Mc. crystal osc. 6AM5, doubler 6AM5, driver amp. QV04/7, p.a. amp. TT15. In-built modulator, complete with 26 volt genemotor. Condition as new. To clear £15 ($30). Circuit for above unit, 10/- each.

NEW VALVE SOCKETS

4/250A	Sockets	20/- each
Acorn	,,	3/6 ,,
EF50	,,	2/6 ,,
VCR97	,,	10/- ,,
805	,,	12/6 ,,
EA50	,,	2/6 ,,
5-pin	,,	2/6 ,,
6-pin	,,	2/6 ,,
7-pin	,,	2/6 ,,
7-pin	P.T.F.E. Sockets	5/- ,,
Locktal	P.T.F.E. Sockets	5/- ,,
Special completely shielded 7-pin P.T.F.E. socket and shield		10/- pair

NEW CHOKES

7-5H. 125 mA. 30/- ea. 14 H. 60 mA. 12/6 ea.
10 H. 4 mA. 12/6 ea.

SPECIAL BARGAINS

Block Condensers, 2 mF./2500 v.w. $2.50
(Pack and Post 25c.)

DC Crystal Holders, new, less crystal, 75c.
Carpenter Relay and Socket, Type 3E1, 1800T 250 ohms, 900T 200 ohms, $1.50.
P.M.G. Strip Boards, containing 24 Jacks, $3.
P.M.G. Strip Boards, containing 48 Jacks, $5.
Headphone Cords, new, 45c pair.
3-pin Plug with two yards Cord, 45c.
Bags of Mixed Resistors (50), $1.25 bag.
P/M Fuse Holders, 45c each.
50 ohm Coaxial Cable, 3/16 inch diam., new, 25c yard.
72 ohm Co-ax Cable, 35 ft. lengths, 3/16 inch diameter, $1.
72 ohm Co-ax Cable, 27 yard lengths, 3/16 inch diameter, $2.
122 Aerial Packs, $6 each.
12-core Cable with Plug, 22 yards long, $5.
Dural Tubing, 12 ft. lengths, ¼ inch diameter, three for $2.
P.M.G. Key Switches, 75c each.

GLIDE PATH RECEIVERS

Type 733D, complete with valves and Crystals $10.00
(Pack and Post $1.00.)

PP/439/APG-30 POWER SUPPLY

Radar type, new. Contains 36 valves—8 6AQ5, 5 6X4, 4 12AX7, OA2, 2 6AK5, 3 6AL5, 2 12AT7, 2 2D21, 6AS6, 4 2C51, 2 6J6, 6AG5, 2 6AH6. Also twin 28v. blower motor, relays, variable conds., transformers, etc. 28v. 500 cycle. Ideal for wrecking. Sorry, no further information. Brand New. $35.

STEEL TRANSFORMER BOXES

6¼ x 9 x 5 inch with matching lid, air vents each end. Ideal for battery charger, etc. Unpainted, new. $1. Discount for quantity.

DURAL TUBING

¼ inch Tubing. 6 ft. lengths 36 ft. for $2 or 40c per 6 ft. length.

POTENTIOMETERS

Wire Wound, 4 Watts, 1¾ inch diameter.
Sizes available: 5, 10, 25, 50, 250, 500, and 50K ohms, 4/- each.

NEW CHANNEL LOCK PLIERS

Type 337W 20/- each
Type 356 End Cutters 20/- each

MAGNETIC RELAYS

Sealed Type
24 volt, 670 ohms, D.p.d.t., size 2 x 1½ inch, Price 15/- ($1.50).
24 volt, 700 ohms, D.p.d.t., size 1½ x 1 inch, Price 15/- ($1.50).

MODULATION AND DRIVER TRANSFORMERS

Modulation Transformer, 15 watts, pair of 6AQ5s to 2E26 valve.
Also Driver Transformer, single ended primary to push-pull grids of 6AQ5s.
£2 the lot, or Mod. Trans. 30/-, and Driver Trans. 10/-.

BRACKET BEZAL LAMPS

½ inch diam. Bezal in Red, Amber, Green. Suit screw type globe. 35c, 4 for $1.20.

CONDENSERS

50 uF. 200v., pigtail	20c ea., $2 dozen
500 uF. 12v., pigtail	20c ea., $2 dozen
12 uF. 50v., pigtail	20c ea., $2 dozen
3 uF. 100v., pigtail	10c ea., $1 dozen
10 uF. 25v., pigtail	10c ea., $1 dozen

CABLES

2-core, shielded, new, 20c yard.
12-core, shielded, new, 40c yard.
3-core, plastic covered, new, 20c yard.
4-core, plastic covered, new, 25c yard.
6-core, plastic covered, new, 30c yard.

HAM RADIO SUPPLIERS

5A MELVILLE ST., HAWTHORN, VIC. Phone 86-6465

8 PARK STREET, GLENFERRIE, VIC. Phone 81-1935

Harry 3ZX became our new President and comptroller of our Wednesday night hook-ups which will be held in future on 3610 kc.—I said kc. fellas, my new slogan is nertz to Hertz!! Vice-President and Junior Vice-President were elected, Herb 3NN and Gavin 3AEJ respectively. Our W.I.C.E.N. Co-Ordinator is Roy 3ZYG, who will delegate h.f. sked responsibilities to Bob 3ARM when necessary.

Following the general meeting a display of home-built equipment was held which was won by Harry 3ZX with his all-band table-top filter s.s.b. tx—handicap of three 807s (uncracked) next time mate!

Next on the agenda was the 80 mx hidden tx hunt which was tracked down in pretty slick time by Roy 3ZYG—following S meter readings only and no d.f. loop—grrr! and me wasting all that brasso on my loop. 3AFU and 3IB/3ZX were only a few minutes behind the winner. The next excursion was a guided inspection of the microwave station which attracted a capacity roll-up and we are very much indebted to the Supervising Technician, Mr. David Kentish, for a most informative description of all phases even if most of us did get lost in the wave guides, channels and gigacycles!

The day wound up with a magnificent spread at the Bordertown R.S.L. Hall for which we are grateful to 5ZAI's XYL Jill, and very able assistant Rayleen, not to mention the other kind ladies who contributed so much hard work. I must also mention the President of the Tatiara District Council, Cr. McLellan, who kindly addressed our meeting and took a keen interest in our activities.

The following week-end many Zone Amateurs were actively engaged in the annual Jamboree-on-the-Air. 3ZX, 3AEJ, 3ATR and 3IB are known to have participated. At 3IB, the station was set up in the local Guide Hall which is very well situated not far from the main town shopping centre. The station was active most of Saturday and Sunday, and a large number of Scouts, Guides, Brownies and Cubs thoroughly enjoyed the occasion. The only disappointment was the clash with the "CQ" Contest, which largely precluded satisfactory overseas contacts. Nevertheless many fine inter and intrastate Jamboree contacts were made. This is the first time a Jamboree station has operated from Dimboola and the event attracted a large number of interested members of the public as well as some welcome publicity and photographs in the local press.

3AEJ is currently working on a phasing rig and hopes to join the sidebanders before long. S.w.l. Neil at Dimboola has revamped a t.v. tuner as a 2 mx converter ahead of his Lafayette rx and is currently constructing a beam, so hopes to be able to copy some of the v.h.f. boys soon. Neil hopes to sit for his ticket in the near future. 3IB still snooping the DX bands and recently hooked 8F4 and VS5 to bring the DX countries score to 149. 28 Mc. observed to be opening to W and JA DX the past few week-ends. Chas 3IB acknowledges a backlog of several hundred QSLs for VR1B activity, but hopes to tidy these up by early in the New Year, a movement of QTH earlier in the year interrupted these activities. 73, Chas 3IB.

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SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division for October was held in the club rooms to a good roll-up of members, and took the form of a buy-and-sell. Very little official business took place, in fact when one looks back on the evening, very little took place at all, and after the distribution of QSL cards was disposed of, and a short smoke-oh took place, the meeting was handed over to the gentlemen in charge of the buy-and-sell—none other than Brian 5CA and Phil 5NN. For the first time in the long history of such nights, very little was offered for disposal and despite the valiant attempts of several members of the audience to keep the night on its feet, it finally expired with a gasp at the unheard hour of 9.40 p.m. A number of members stayed behind to natter and exchange ideas, but the vast majority having absorbed the lethargic conditions existing at the meeting, listlessly left for home, giving their families the shock of their lives, causing several XYLs to wonder as to whether they should call the doctor or wait until the morning.

Opportunity was taken at the meeting to welcome back Bob 5PU, ex Georgia Tech., who has returned to VK5 after his sojourn in W land. He looked fit and well, and settled in at the meeting in such a manner that it did not seem that he had been away at all. I meant to ask him as to his proposed QTH, the rumours have had him in residence in the area of Geoff 5TY, but I believe it will be Kensington. Right Bob?

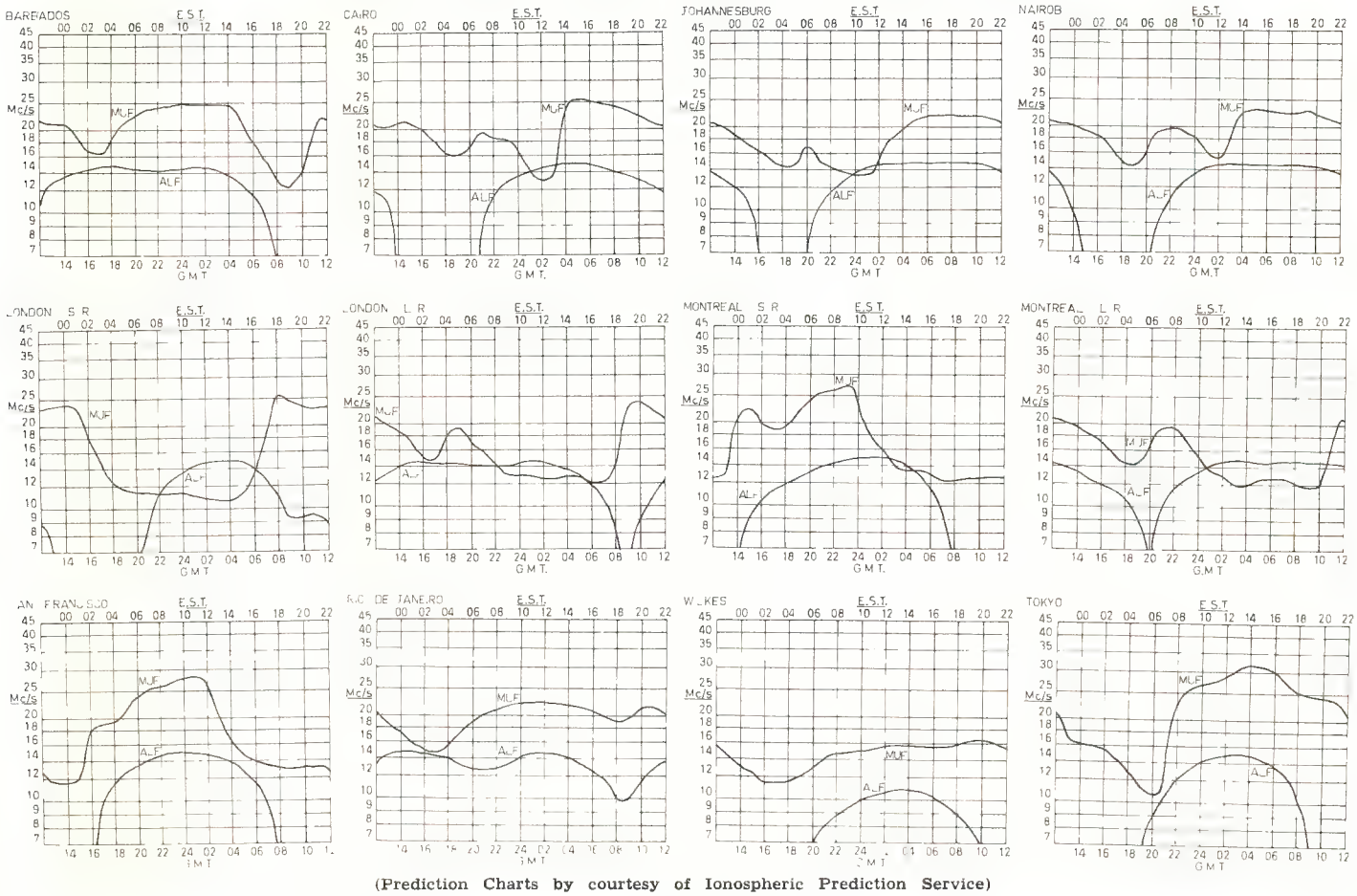
Sat next to Brother John 5VG, better known on the air as Griff, at the meeting and was cut to the quick when he told me that he has been nominated for the W. S.s.b. Club, despite the fact that he is still an a.m. man. I gave him the Gypsy's warning as to what would happen to those who desert the cause for "The Thing," but I don't think he was very impressed. Anyway, I will keep an ear on him, little does he know that I listen into his Sunday morning sked with Ross 6DA on 14 Mc.—now wait a minute, is it Sunday morning, afternoon, or night? Oh dear, oh dear, I might miss something.

Wicen was represented in the recent E.F.S. Bushfire Clean-up Week Procession the other Saturday. The vehicles were those of Treva 5ZIS and Geoff 5TY, being accompanied by John 5KX, Brian 5CA, Howard 5ZBE and the old reliable, George Edmeades. Both vehicles were suitably decorated with signs drawing attention to Wicen, as well as with anti-bushfire slogans, to say nothing of an abundance of aerials, in fact they were later described as resembling a couple of enraged porcupines.

Regarding the above paragraph, was more than pleased to hear Geoff 5TY when describing the procession to the meeting, give George Edmeades a pat on the back for his untiring enthusiasm in the cause of Wicen. George is one of those retiring, self-effacing hard workers who can always be relied upon at all times for that little bit extra when needed. You'll do us George—keep up the good work.

John 5KX, complete with number one son, noticed at the meeting and from all accounts the said son is showing signs of being keen

PREDICTION CHART FOR DECEMBER 1966



(Prediction Charts by courtesy of Ionospheric Prediction Service)

on Amateur Radio. Understand that he cut his teeth on the recent successful Wicen exercise, and if this is true, then he could not have had a better background.

Rob 5WA and Marshall Hider, firm buddies, noticed together at the recent Department of Supply auction at Finsbury. Both gentlemen were more than impressed with the quantity and quality of the goods offered for sale, and but for the fact that they never had time to rob a bank on the way down, nor did they have a spare fork lift, they probably would have made a decided dent in the goods offered. You should have seen the glint in their eyes as they told me about it!

Bob 5ZNH, the instructor at the radio classes, has certainly made an impression on his pupils. Snooping around for news at the meeting, I could not but note the enthusiasm and keen interest displayed by the said pupils in their conversation with each other, and also the respect they had for his knowledge and his sincere interest in their welfare.

Geoff 5TY, the Wicen co-ordinator, made a short explanation in answer to the letter written by John 5JC on the recent exercise, not because he wanted to, but because some member in the audience sought clarification on several points covered in the letter. I thought he handled it quite well, as did the audience, judging by their reactions.

A number of VK5 boys, not really old timers in the true sense, but who have been in the game for a long time, were saddened to hear of the passing of Gordon 3XU and ex-5DU, and felt that the obituary in the October magazine spoke for itself. Speaking personally, Gordon will always be remembered in VK5 for his cheerful and adventurous approach to Amateur Radio during his sojourn in this State and as one who was always more than willing to assist him in his self-assumed role of Don Quixote and the tilting at any windmills available, I sincerely regret his passing, as they never came any better than Gordon.

I notice in the VK2 notes that afternoon teas are going for the asking, and prepared by the dainty hands of my palsy-walsies Mona 2AXS and Hebe 2AOK and the XYLs of Council members 2ZRD and 2CH. Just think of it, scones, strawberry jam and cream, and oodles and oodles of tea, to say nothing of an eyeball QSO with the femininity. I have noted the number to ring, 55-5660, so look out girls, that hunk of masculinity from VK5 might appear from the clouds at any time. Whacko!!

Rumour has it that the mystery of George's 5CV stolen rx is almost solved, and that he is happy to report that no Amateur is involved. Nice work George, hope the rumour is true.

Sorry to learn that Comps 5EF, he of the quack-quack fraternity, has had a spell in hospital, but glad to know that he is home and on the way to good health again. Quack-quack or no quack-quack, he is a good scout.

During Oct., some of the VK5 gang decided to have a shot at the VK one-way t.v. record, with very satisfactory results. The group transmitting from Willunga Hill were successfully received at South Hummocks, a distance of approximately 95 miles, photos being taken of the received picture as evidence and good clear evidence it was. The South Hummocks set-up was manned by Jim 5ZGV and Edwin 5ZTS, with the Willunga Hill gang including Mait 5AO, Rick 5ZFQ and Andrew 5ZBP. Nice work, fellows.

Jamboree-on-the-Air seemed to be quite a success in VK5, judging by the number of stations on the air for the event. During my short period of listening on the bands was intrigued to hear a voice from the shack of Carl 5SS calling Ross 5KF at Crystal Brook. Now I know that there are times when our respected and revered President might wish he were anywhere than in Adelaide, but putting him in Crystal Brook was stretching it a bit. Anyway, I would expect the citizens of Manningham to put on a bit of a buck if Ross was snatched from their domain.

Received a letter and a couple of colour slides of my shack taken by Fred 3YS during his recent visit. With expected VK3 cunning, parked right in the most prominent position on shack table is "The Thing," black box and all, the sight of which can be expected to give my legion of a.m. followers a bad attack of the collywobbles, or possibly xyptozbbtka! Don't believe your eyes chaps, it was a frame-up!

I sneaked across the border into VK3 this month—Ballarat to be precise—the reason being that my daughter was over there adjudicating in the physical culture and calisthenics section, at South Street, and as my XYL and I had not been there since 1949, I decided to run the risk and mingle with enemy. I managed to come out unscathed, although by the way those VK3 motorists came at me from all sides and crossings, to say nothing of the stop signs, I began to wonder at times whether my visit was as unknown as I thought it was. Several times I thought I saw Pincott (3AFJ) lurking around the corners, but luck was with me, although possibly my false beard helped a lot. Thoroughly enjoyed ourselves, and there is no doubt about it, Ballarat is definitely a garden city, well worth visiting, although I would deny it if asked!

Note from the current issue of the VK5 journal that Gary 5ZK was married to Cecily on 5th September, the honeymoon being spent at Port Lincoln. I also note with some dismay that he is reported as saying that the design of the new residence provides for the shack to be next to the kitchen which will give him an opportunity of working some DX whilst doing the cooking and polishing the floors, etc. This, of course, provides me with the chance to come up with my well known and tried advice: "DX Before Dishes". Congratulations to the happy couple, and best wishes for the future. Cecily—keep a watchful eye on the kitchen utensils, baking dishes, cake tins, etc. They have been known to become chassis in the most mysterious fashion. Ask my XYL, she can speak with experience!

The appeal by Eric 5ZEJ in his v.h.f. notes in the journal for A.R.R.L. Handbooks and Valve Data books for the Port Pirie Radio Club, met with pleasing results, but further copies will be gratefully received as the number of boys interested by far exceeds the supply of books.

Visitors to VK5 during September included Doug 6EP, 6ZDB and 6ZDD, to say nothing of David 3ZTN and Martin 3ZOL. We trust they enjoyed their stay in the city of culture and beauty. Quiet please, gentlemen, remember we come of modest stock!

The letter to VK2 from the VK5 Federal Councillor, Geoff 5TY, on the matter of the proposed Federal Constitution, a copy of which appeared in the current issue of the VK5 journal, made interesting reading, and should certainly merit consideration by those concerned. I have moved over in the hot seat to make room for Geoff, although just how we both will exist in such close proximity is open to conjecture!

It was reported in the VK5 journal recently that the Sunday morning 5WI broadcasts on 3.5 Mc. were to be discontinued and that the transmission would be transferred to 7 Mc., owing to propagation conditions varying as the sunspot cycle progresses. I thought this worthy of a paragraph in the W.I.A. column in the local "Advertiser," only to find at a later date that not only was this purely a test transmission on 7 Mc., but horrors of horrors, that it was on s.s.b. by Phil 5NN, who in explanation said that apparently the lines of communication had become crossed somewhere, but I have an uneasy suspicion that it is just an undercover attempt to infiltrate "The Thing" into the realms of the s.w.l. and non-technical readers of the "Advertiser" column! I tell you, you have to watch them, they will come at anything.

The earlier paragraph regarding George's 5CV stolen rx unfortunately has an unhappy sequel. It now appears that the culprit was a 13-year-old who specialised in wrecking and disposing the parts to various shops. Just imagine it? A Collins rx wrecked for parts!! No wonder George wept tears of blood. My sympathies OM.

In the recent flurry and skurry connected with the lost nine-year-old little girl at Mylor and the subsequent activities associated with the search, noticed the name of Jack 5AM, of Murray Bridge, and his alsatian dog as having been among the host of searchers. This is not the first time that he has had a hand in such activities, and it is good to be able to comment on such public spirited actions of this nature. Nice work Jack, when will the hound-dawg be radio controlled?

At great cost, and certainly without the permission of the gentleman concerned, I have it on definite authority, that a certain VK5 has kept his radio activities hidden, or should we say concealed, for years from even his family. It seems that on a certain occasion a daughter's boy friend happened to catch a glimpse of the shack and queried the daughter "Is your father a radio amateur?" Daughter's reply: "I don't think so," would rock everything, especially as he is still ranked among the very active VK5s and known world wide. Just how did he do it The name will not be revealed to protect the guilty, but just have a teeny-weeny guess!

Uncle Tom 5TL has joined the 53.1 Mc. net using one of the W.I.A. converted Pye transceivers, of which there are about 48 in use at the moment of writing. This forms the basis of a useful network, should the occasion ever arise, which we hope never will, but it is better to be prepared.

Jim 5JK has been on the sick list again, bronchitis and its associated discomforts. Jim is giving Frank 5MZ a run for his money for the title of VK5's gift to doctors and chemists because he is, at the moment of writing, about to enter hospital for surgery on his back, although he bravely assured me that it was nothing, only two or three stitches or so! What it is to be a hero, I nearly keeled over at the thought of those stitches. Hope all is well by the time you are reading this Jim.

Can't help but notice an increasing tendency in the magazine for readers to write in and somewhat shoot down in flames the writers of articles which appear at various times in the magazine. I can't claim to be a judge of good manners myself, being only in the peasant class, but I feel a personal letter to the writer of the article would serve the same purpose, without holding the author of the article or column up to the public gaze. After all, it is hard enough to persuade the average Amateur to put pen to paper, let alone cheerfully accept a fee of criticism. The time taken to write in the letter of criticism could well be put to writing an article on the subject and thus joining the targets to be sniped at!

Well, just as I was about to "put this month's notes to bed" it dawned on me that they are for the December issue. Therefore, it is with pleasure that on behalf of the VK5 Division I extend the Season's Greetings to all other Divisions. May Xmas be a merry one to all. Don't eat all the goodies, leave some for me, and above all, when the festivities are at full blast, spare a thought for a grey haired old so-and-so who will be in hiding somewhere in the hills, for fear of the inevitable invasion of VK3s during the festive season. 73, de 5PS—PanSy to you.

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WESTERN AUSTRALIA

Greetings and salutations to you all from this side of the black stump. The months are certainly rolling around in quick time this year, or so it seems, however as my old pal Alby was wont to quote: "everything is relative." That scratching, scraping noise you can hear is the old gentleman in the red bathrobe and white whiskers struggling to make his way down the chimney. Personally I am going to leave the door open for him in case he damages the Swan 350 I ordered.

On the sick list this month we have Bill 6WP, a life member, who has had quite a spell in hospital. Hope the road to recovery is swift and easy for you Bill.

Another who has also been in hospital is Mike 6QJ, who recently moved into VK3 territory in order to undergo surgery. Our best wishes for speedy recovery are also extended to you OM.

Well another Jamboree-on-the-Air has come and gone, what a pity it was marred by a world-wide DX contest. Of course, there are those who will argue that the Jamboree marred the DX contest, but whichever side is correct, it seems a great pity that the powers that be could not choose a couple of weekends which do not clash. After all, there must be plenty of "free" weeks in the contest calendar.

During the last couple of Divisional meetings we have been fortunate enough to view a couple of excellent technical films. After viewing the first of these, Aub 6XY was determined to be present at the next. Sure enough, he turned up, complete with tape recorder (cunning lad) after travelling the 160 or so miles from Wickepin. It was also rumoured that the rest of the Narrogin group were going to turn up in force, but they failed to show. Probably they learned that I had alerted the local constabulary.

News to hand that Herb 6XO has not only been on the air, but also IN the air, winging his way eastwards with charming ease. Right across to ZL, I understand. Only a relatively short trip from the point of view of time, but none the less very enjoyable I'll bet.

Tuning across the bands not so long ago I came across a mighty signal which originated from the QTH of 6GB, who it seems, is making something of a comeback to Ham Radio. All the more the merrier.

Band conditions on the average seem to be improving again, with some good openings on 15 and 10 mx. 40 mx is still very patchy, while 80 is enjoying quite a spate of QRN.

From the Cloak and Dagger department, my spies have taken off sufficient time from their plans to destroy the "Barracks archway" and inform me that Brian 6VW and Peter 6ZEP have made moves to alter sky line around their homestead. A tower of some sixty odd feet complete with rotators and so forth. What about a commercial triband beam now fellers? Together with their hilly location, this structure should provide an additional hazard for unwary airplane pilots.

Talking of airplanes and pilots, reminds me that Tom 6TH recently took part in an air race. Always up in the air about something, this chap, why, last time I heard about him he was 40 feet up on 6RG's tower helping with some repairs. Puts out quite a respectable sideband signal, too.

Clem 6CW, who has been enjoying oodles of long service leave had quite a busy week-end recently. At a Boy Scout function, in which the Institute was invited to participate, Clem and a few stalwarts erected and operated a typical Ham station. Among those responsible were Norm 6NS, Graham 6ZEZ, Laurie 6ZEA. There were others, too, no doubt, but my memory is not serving me too well. Just as well, too, or I might remember the name of the shocker who took one end of a hundred yard reel of wire in his teeth and shinned up a near-by pole in order to anchor one end of the long wire antenna. The fact that the aforementioned pole was one belonging to the S.E.C. and was adorned by a street light, and furthermore was located in Canning Highway is neither here nor there. The rig was housed in a tent and included a KWM2 and a 6 mx rig working into a ground plane. The KWM2 worked into the long wire and also on occasions, into a nearby p.a. system, thus greatly mystifying a bewildered stall holder who hence forth regarded his microphone with great suspicion. Also available in the tent were a number of screeds extolling the virtues of Ham Radio and the Youth Radio Scheme. Well done, sirs, well done!

I think that in all fairness the VK3 Division should be warned that an invasion seems most likely to occur about the latter end of this month. Those involved are 6AQ, 6RT, 5VG, 5YB, 4EP, and they plan to decend on the unsuspecting city like a pack of——err, Hams, for a couple of weeks, too, mark you! Will someone please advise VK3 cause I can't be sure that they will read these notes. Thanks.

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76 View Street, Hobart, Tas.

Another of my DX type spies reports that John G3LXV, ex VK6JJ, is treasuring fond memories of his recent five-year stay in this fair city and passes 73 to his many friends.

May I take this opportunity, on behalf of the VK6 Division to wish you, one and all, a Very Merry Xmas and a Happy New Year. 73, Ross 6DA.

— · · · —

TASMANIA

Following the recent elevation of Terry 7CT to the rank of life membership, a little further investigation took place into the records and it was discovered we had on our books another member whose record appeared to eclipse that of Terry. This member's details went something like this: A Councillor for 15 years, commencing back in 1937. QSL Manager 9 years, Publicity Manager 1 year, Vice-Pres. 2 years, Traffic Manager 1 year, B'cast Officer for 4 years, President for 7 years, member of the Distribution Committee for 2 years, and Lecture Officer for the last 12 months. The said gent (and who could call him anything else) appears to have had some job or other since 1937, excluding the war years, which seems a pretty good record, and so prompted Ian 7ZZ to propose Tom 7AL for life membership, and I feel sure there would not be one member who could not say, "Congratulations 'Uncle Tom'! If anyone deserves this honour, then you do." However, don't let it go to your head, we aren't going to pension you off yet, you're good for a few more years in some capacity. What about Div. Correspondent for instance—or Secretary even!

This year's Jamboree was without a doubt our best ever effort, a total of 45 Scout Groups were catered for, and I feel this is indeed a credit to all who took part. Do you realise this is three times the Australian average based on population. Congrats. to VK7, we may be the smallest Division in numbers, but we certainly aren't in participation, a most commendable effort indeed, of which we can feel justifiably proud.

At the time of writing the Hamfest is four weeks away, but by the time you read this, if you do, it will be over by about a week, but if preparations are any indication, it will be a beaut this year. All I can say at the moment is, "I hope I saw you there, and you'll come again next year."

The Hamfest might be over, but the v.h.f. season is just starting, and it gets away this year with the "Ross Hull" Contest, commencing on Dec. 7. Remember, it's your best seven days that count, and as I've said before, they don't count a bumper if you don't get your log away.

We should have a "Kiwi" visitor in the State over the holiday period. My spies tell me that ZL2NH will be touring the State. I don't know of any other visitors at this stage, but I've no doubt there will be quite a number coming to see the best place in the Commonwealth. To those who are coming, may I remind you to bring your Call Book. It has got the addresses of most licensees in it, and make yourself known wherever you go. I'm sure you will be shown the renowned "Tassie hospitality."

Speaking of holidays, I'm going to have one myself this Christmas for a change, normally it's a mid-winter job for me, but it has all been planned what's got to be done—might get a better rest if they were in winter time again, still, one can but try.

As this will be the last you'll read of my piffle for the year 1966, may I take this opportunity of wishing my readers, on behalf of the President, Council and members of the VK7 Division, a Very Merry Xmas, a Bright and Prosperous 1967, and in fact all the things you wish yourselves. 73, Geoff 7ZAS.

HAMADS

Minimum 50c, for thirty words. Extra words, 2c each.

Advertisements under this heading will be accepted only from Amateurs and S.w.l's. The Publishers reserve the right to reject any advertising which, in their opinion, is of a commercial nature. **Copy** must be received at **P.O. Box 36, East Melbourne, C.2, Vic.,** by **5th of the month** and **remittance must accompany** the advertisement.

DUE to withdrawal of loaned gear, Cessnock Youth Radio Club would like to beg, borrow, or buy very reasonably a Communications Rx. Particulars to Hon. Sec., 78 Aberdare Rd., Cessnock, N.S.W.

ESTATE the late VK2ADC. Gordon McLeod was constructing a copy of the Collins KWM-2 Transceiver, including an exact duplicate of the Collins PTO with its dial mechanism, etc. All components, all brand new, including switches, relays, Collins mechanical filter, etc., are there, now sorted out, chassis construction remains to be undertaken. Anyone interested to complete the project, contact VK2AVA. The lot is available for $250. Arie Bles, VK2AVA, P.O. Box 23, Springwood, N.S.W.

FORD Falcon De Luxe Sedan 1961/2, beautiful condition, been under wraps all this year, surplus to requirements. Will exchange for Collins 32S-2 or 3, p.s.u. and handbook in mint condition, or sell $750. VK3TD, Phone 787-1407 (Melb.).

FOR SALE: Going s.s.b., must sell. Hallicrafters HT40 Tx, 75 watts a.m./c.w., 80 to 6 metres, $100. 240/100v. a.c. 300 watts stepdown transformer, $10. Heathkit VF19 v.f.o., 80 to 10 metres, $19. Heathkit HP20 power supply, 120 watts at 600v. 200 mA. or 600v. 120 mA. and 300v. 100 mA., plus 130v. 30 mA., 6.3v. 11 amp. or 12v. 5 amp., $20. Heathkit HR20 Rx, s.s.b., 80 to 10 metres, $95. Leader LSG11 Signal Generator, 125 Kc. to 300 Mc., $20. All equipment in good condition. Complete with circuits and Handbooks. Will sell complete, $230 or best offer. **VK3ABQ,** J. Moran, 54 Mont Albert Rd., Canterbury, E.7, Vic. Phone 81-0321, **Ext. 32.**

FOR SALE: New National 1 watt Citizen Band 11 transistor Transceiver, Model RJ-15A, with external Zephyr mic., write for more information, $80. Also one set Tokai C.B. Band 9 transistor Transceivers with separate built-in speaker and mic. for telephone-like operation, $60. J. Sykes, 90 Melbourne Rd., Sorrento, Vic. Tel. 42874 after 5 p.m.

FOR SALE: One 240 volt 400 watt portable Alternator including Villiers 4-stroke motor as new. Suitable Field Day purposes, $145. T. Rodda, VK3ATR, 140 Scott St., Warracknabeal, Vic.

FOR SALE: 120 watt a.m. home-built Transmitter, band switched 80-40-20, v.f.o. and parallel 6146s, 600v. power supply, class B zero bias 807s modulator, good condition. Home-built 5-band switched Receiver, 455 Kc. xtal filter, requires little work. BC457A, BC453B (Q5er), both with tubes. 455 Kc. Collins mechanical filter and 3 crystals (never used) for s.b. exciter. 1966 A.R.R.L. Handbook. Quantity tubes, parts, etc. Offers for any or all. W. Yates (VK2AWY), Box 434 Post Office, Orange, N.S.W.

PANDA CUB, all band table top commercial tx, 60w. c.w./40w. a.m., self contained with in-built v.f.o. and power supply, $80 or consider exchange for Lafayette HA230 Receiver. VK5WD, Box 1962P, G.P.O., Adelaide, S.A.

SELL: Hy-Gain Model 2TQ matched trap kit for building 40 and 80 metre Doublet comprising 2 large end insulators, 2 40 mx traps plus centre insulator and instruction manual. An ideal 40 and 80 mx antenna for confined space. Cost $25 to land. Sell at $18. Roth Jones, 1 Albert Rd., Melbourne, S.C.2, Vic. Tel. 26-6911.

SELL: Six Receivers specially modified for S.w.l's. CR100 with manual, £35. R. & H. Hambander (9 valves and 3 diodes), £25. Hambander, 4 bands, 13 valves and 4 diodes, £35. Hambander, 6 bands, 15 valves and 3 diodes, £45. General coverage, 75 Kc. to 19 Mc., £22. S.W. 3 to 18 Mc., 10 valves and 2 diodes, £25. 144 Mc. Super-regen. with r.f. stage, £10. Tasma 70 Mc. f.m. Carphone and vibrator power supply, 26 valves (no crystals), £15. Six band Mod. Osc., 85 Kc. to 75 Mc., £10. Aires 35v. Camera with three lenses, normal, tele., wide angle. Astronomical Telescope 50 x 50 for sale or exchange for good Tape Recorder or other equipment. H. Roach, 28 Foster Ave., Glenhuntly, Vic. 58-3757.

SELL: T.V. Chassis, new tuner, sync. and sound good, no pix tube, $30. Geloso V.f.o., $15. Woden UM2 Mod. Trans., $15. Also converters, etc. Offers or trade for antenna tower. VK3WW, 465-2991 (Melb.).

SELL: 12 volt 300 watt Genemotor powered by a 1 h.p. 4-stroke engine, $60. Pye Echo Sounder, 12 volt, $50. Phone 87-1930 (Melb.)

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WANTED: Woden UM3 Modulation Transformer. E. R. Gray, VK3ZSB, 95 Atherton Road, Oakleigh, Vic. Phone 32-4529 (working hours), 56-3201 (after hours).

INDEX TO VOLUME 34—1966

ANTENNAE

An Indoor Pylon Slot Aerial for 145 Mc. .... May p.11
Matters Mobile .... Feb. p.3
Series Phased Array for 14 Mc. .... Oct. p.4

AUDIO AND MODULATORS

Matters Mobile .... Feb. p.3
Transistor Amplifier Design:
Part One .... Sep. p.5
Part Two .... Oct. p.7
Part Three .... Nov. p.9

BOOK REVIEWS

Mullard Voltage Regulator (Zener) Diodes .... Sep. p.15
Technical Topics for the Radio Amateur .... Jul. p.10
The Radio Amateur's Handbook .... Jul. p.10
Transistor Interchangeability List .... May p.17
1966 World Radio T.v. Handbook Aug.p.12

CONTEST RULES AND RESULTS

Aust. Results of World-wide DX Contest, 1965 .... Oct. p.15
John Moyle National Field Day Contest:
1966 Results .... Jun. p.9
1967 Rules .... Dec. p.11
Remembrance Day Contest:
Corrections and Additions to 1965 Results Mar.p.13
1966 Rules .... Jun. p.12
1966 Results .... Nov. p.18
Ross Hull Memorial Contest:
1965-66 Results .... May p.18
1966-67 Rules .... Nov. p.17
VK-ZL-Oceania DX Contest:
1965 Results .... Apr. p.13
1966 Rules .... Jul. p.13

INSTRUMENTS

An Experimental 100 Mc. Crystal Oscillator .... May p.10
How is Your Dial Calibration? .... Dec. p.7
Matters Mobile .... Feb. p.3
Modifying the Palec Valve and Circuit Tester .... Apr. p.2
Monimatch Mark 3 and 4 .... Feb. p.11
Self Powered C.w. Monitor .... Jan. p.9
Simple Transistor Tester .... Dec. p.3

MISCELLANEOUS

Amateur Radio Hall of Fame Announced .... Oct. p.17
Australian DX Century Club Award .... Jan. p.11
Australian D.X.C.C. Countries List .... Jan. p.12
Australian V.h.f. Century Club Award .... Jan. p.11
Boeing Demonstrates Meteorburst Communication .... Jun. p.15
Central Queensland Branch Display .... Jun. p.15
Father Xmas, Fairy Godmothers, and all Aug.p.11
"Fifty and Over" .... Jun. p.11
"Fifty and Over" .... Oct. p.14
Gateway of India Award .... Feb. p.15
Great Circle Map .... Feb. p.13
Higginbotham Award .... Jun. p.21
Hints and Kinks:
Feeder Spacers .... May p.17
Filed Information .... Sep. p.11
Protective Cover for SO239 Connector .... Jan. p.8
Lightning .... Apr. p.15
More About Morse .... Jan. p.7
P.A.C.C. Award .... Jul. p.16
Project Australis .... May p.14
Project Australis .... Jul. p.11
Project Australis .... Nov. p.21
Reciprocal Licence issued by U.S.A. .... Jun. p.21
Standard Stations received in Far East .... Jun. p.15
Sunspots and Predictions .... Sep. p.14
Survey of Occupancy of H.F. Bands .... Oct. p.15
Telepersonality—George Jacobs .... Mar. p.6
The Radio Ham .... Sep. p.20
"They and Me" .... Sep. p.13
VK4AT might go on the Air Aug.p.11
Further Notes on VK4AT's Power Supplies .... Sep. p.7
VS9MP, Maldive Is. .... Jun. p.11
W.I.A. Federal Convention, Easter 1966 .... May p.15
W.I.A. Federal President's Annual Report .... Jun. p.17
YL Operator Club .... May p.10
YO Awards .... Oct. p.17
YO Awards .... Nov. p.6

POWER SUPPLIES

Portable 240v. A.C. Power Supplies .... Oct. p.3
Power Supplies for S.s.b. Exciters .... Jul. p.9
Technical Correspondence:
Diodes in Power Supplies .... Sep. p.17
"The Mode of Power" .... Dec. p.3
Transceiver Power Supplies Dec. p.5

RECEIVERS

Accessory Package for Transceivers .... May p.5
A High Stability V.f.o. for Receiver or Transmitter .... Nov. p.6
A Pre-Amp. for 2 Metre F.M. Mar. p.5
Audio Clipper/Limiter for C.w./Phone Reception .... Mar. p.9
Band Switched All-Triode Converter .... Jan. p.3
Errata—Pye Reporter .... Feb. p.12
F.E.T. Pre-amp. for 144 Mc. Sep. p.13
How is Your Dial Calibration? .... Dec. p.7
Matters Mobile .... Feb. p.3
Netting with Transceivers .... Dec. p.9
Noise Limiter for Mobile Use Jun. p.5
Nuvistor Converters for 50, 144, 220 and 432 Mc. .... Jul. p.5
Some Thoughts on Hang A.g.c. Systems .... Jun. p.7
Some Thoughts on Six Metre T.v.i. .... Aug. p.5
SX28 Receiver Modifications .... Mar. p.2
Transistorised Amateur Band Receiver:
Part One .... Aug. p.2
Part Two .... Sep. p.2
Part Three .... Oct. p.11
Part Four .... Nov. p.7
Two-Unit Pye Base Station Conversion .... Jun. p.3
Your Pye Reporter—Tunable or Crystal Locked .... Jul. p.2

SIDEBAND

A.m. Final as Linear Amp. .... Sep. p.9
Bad Sideband Signals .... Dec. p.9
Ceramic Filters for S.s.b. .... Nov. p.13
Class A Amplifiers .... Apr. p.11
Commercially Made Filters .... Aug. p.9
Crystal Filters for S.s.b. .... Aug. p.9
Drake TR-4 Transceiver .... Sep. p.9
Linear Amplifiers .... Apr. p.11
Linear Amplifiers (cont.) .... May p.13
Netting with Transceivers .... Dec. p.9
Power Supplies for S.s.b. Exciters .... Jul. p.9
Single Sideband—Power Measurements .... Dec. p.6
Some Thoughts on Hang A.g.c. Systems .... Jun. p.7
S.s.b. Transceivers .... Jan. p.17
S.s.b. Transceivers (cont.) .... Feb. p.15
Technical Correspondence:
Diodes in Power Supplies .... Sep. p.17
"The Thing" — Transistorised Nov. p.5
Transceiver Power Supplies Dec. p.5
Transistorised S.s.b. Generator .... Sep. p.3

TECHNICAL MISCELLANEOUS

Amateur Television Activities in South Australia .... May p.3
Experimental F.M. Station for Victoria .... Feb. p.17
Interference to Television and Radio Reception by Nearby Radio-Communications Tx's Nov. p.2
Overlay Transistors .... Feb. p.8
Some Low-Pass Filter Designs for Amateurs .... Apr. p.9
The Fatal Current .... Feb. p.9
Technical Correspondence:
Transistor Amplifier Design Oct. p.5
Author's Reply .... Nov. p.15
V.h.f. Net Frequencies .... May p.14

TRADE REVIEWS

Great Circle Map .... Feb. p.13
Toroid Baluns .... Jul. p.11

TRANSMITTERS

Accessory Package for Transceivers .... May p.5
A High Stability V.f.o. for Receiver or Transmitter .... Nov. p.6
An A.M.-C.W. Exciter for 144 Mc. .... Apr. p.5
An Experimental 100 Mc. Crystal Oscillator .... May p.10
Errata—Pye Reporter .... Feb. p.12
Matters Mobile .... Feb. p.3
Netting with Transceivers .... Dec. p.9
Single Package Transmitter for 160 and 2 Metres .... Jan. p.4
Single Sideband—Power Measurements .... Dec. p.6
Some Thoughts on Six Metre T.v.i. .... Aug. p.5
The 80 and 40 Metre "Transistor Special" .... Sep. p.10
Errata .... Oct. p.15
Transistor Amplifier Design:
Part One .... Sep. p.5
Part Two .... Oct. p.7
Part Three .... Nov. p.9
Two-Unit Pye Base Station Conversion .... Jun. p.3
6/60 Special .... May p.6

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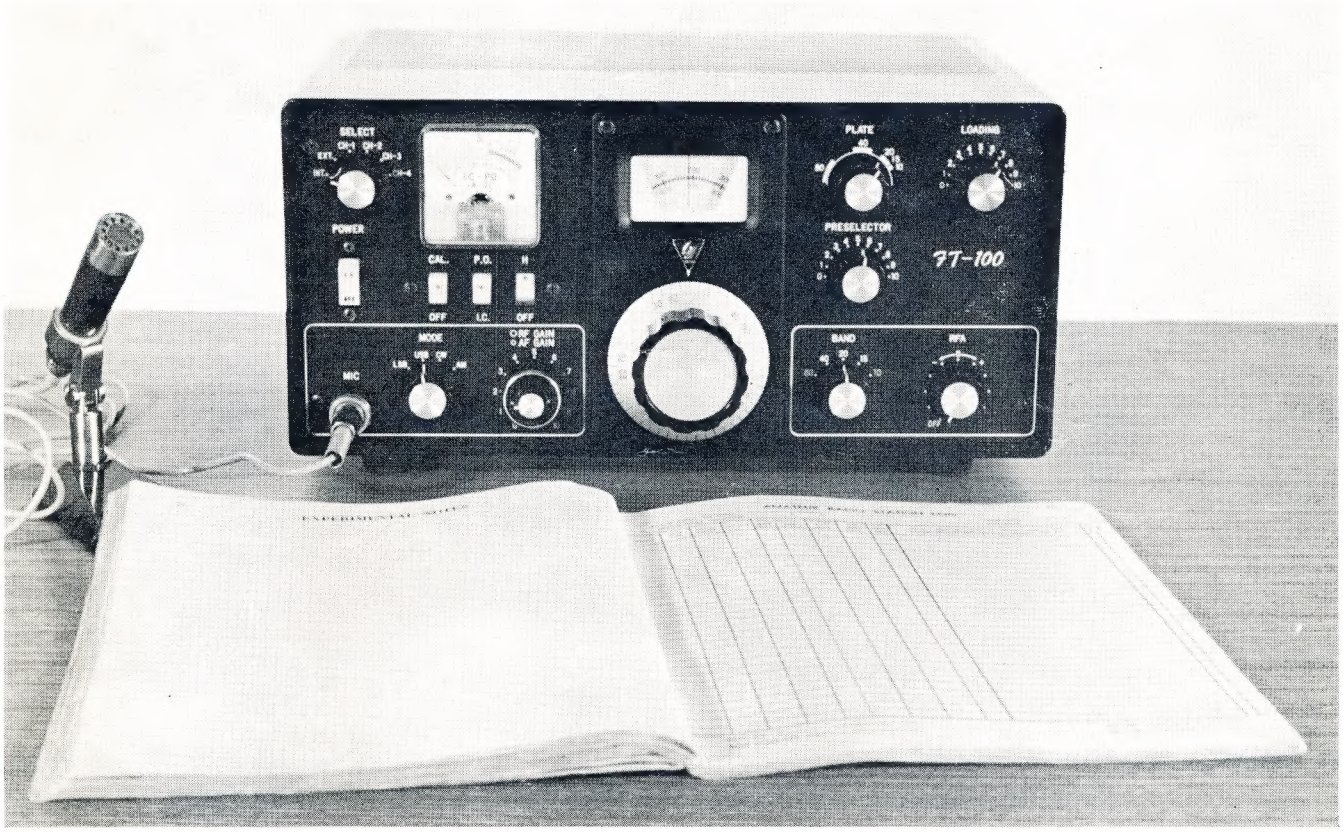

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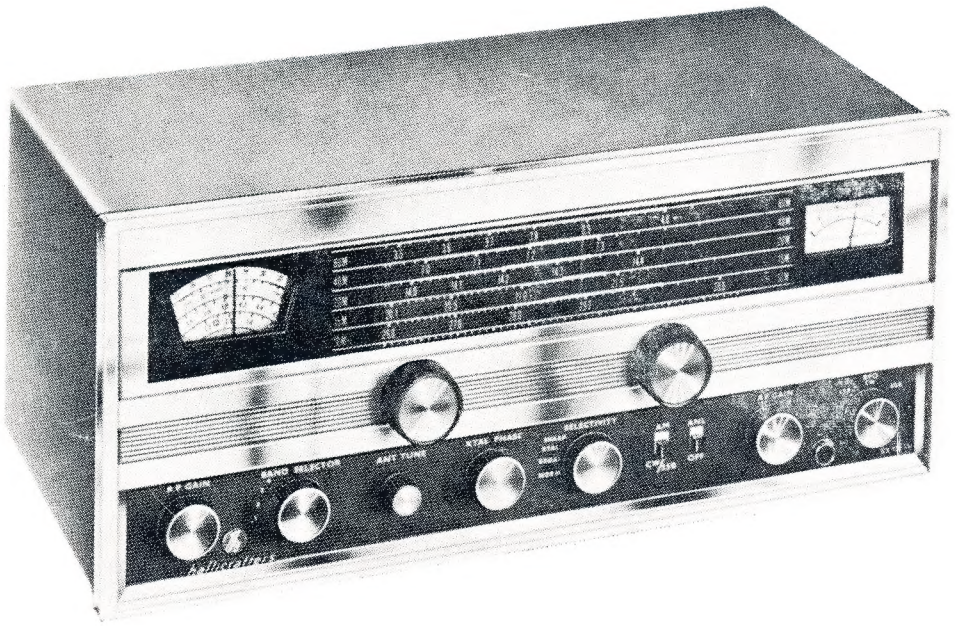

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